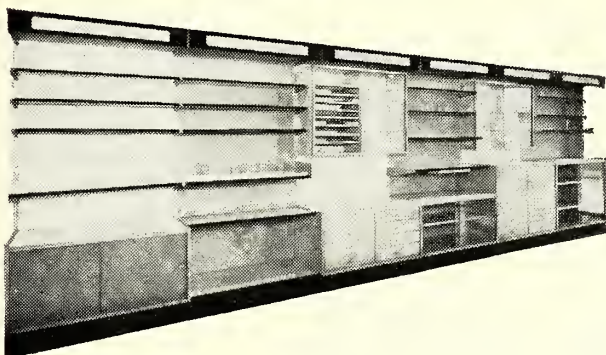


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C.3



CHEMIST AND DRUGGIST

ESTABLISHED 1859

THE WEEKLY NEWSPAPER FOR PHARMACY
and all sections of the drug, pharmaceutical,
fine chemical, cosmetics, and allied industries

*Official organ of the Pharmaceutical Society of Ireland
and of the Pharmaceutical Society of Northern Ireland*

Volume 187

January 21, 1967

No. 4536

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C&D

CHEMIST AND DRUGGIST

Volume 187

JANUARY 21, 1967

No. 4536

Poisons Law Changes

ANTI-HISTAMINES TO BE ON PRESCRIPTION?

THE Home Office has announced that Statutory Instruments giving effect to recommendations made by the Poisons Board are being prepared. Changes proposed in the Poisons List and Rules are:—

- (a) *Piritramide and its salts* will be included in Part I of the Poisons List and in the First Schedule to the Poisons Rules.
- (b) *Paraldehyde*, and *meclofenoxate and its salts* will be included in Part I of the Poisons List and in Part B of the Fourth Schedule to the Poisons Rules. (ANP 235, Lucidril).
- (c) *All antihistamine substances* in the Poisons List, and their salts and molecular compounds will be included also in Part B of the Fourth Schedule to the Poisons Rules, and the labelling requirements in paragraph 9 of the Seventh Schedule will be deleted. (The exemption in the Third Schedule in respect of preparations intended for external application only and preparations containing not more than 1 per cent. of antihistamine substances for application in nose or eye remain).
- (d) *Vascular plants and their seeds* will be included in Group I of the Third Schedule to the Poisons Rules.
- (e) The existing exemption in the Third Schedule to the Poisons Rules in respect of *feeding stuffs containing "Androgenic, oestrogenic and progestational substances, the following . . ."* will be replaced by an exemption for *feeding stuffs containing hexoestrol or stilboestrol only*.
- (f) Substances containing less than 3 per cent. of *oxycinchonic acid or its derivatives* will be exempted from control under the First Schedule to the Poisons Rules; and the exemption in the Third Schedule in respect of preparations for external application containing not more than the equivalent of 3 per cent. of *oxycinchonic acid or its derivatives* will be deleted. (Nupercainal ointment.)

Metaldehyde Slug Bait

DANGER TO DOMESTIC ANIMALS

THE danger of metaldehyde slug bait pellets to domestic animals is the subject of recent correspondence in *Veter-*

inary Record. One writer reports having seen three cases of poisoning in dogs, two of them fatal, during 1966. Another had seen seven cases (six dogs and one cat) in a ten-day period in 1964. Both correspondents believe that dogs find the pellets "irresistible." It is suggested that the labelling of the products is inadequate.

Prices "Freed"

FIXING BANNED ON MORE GOODS

MORE goods have been debarred from resale price maintenance by the Restrictive Practices Court. As in previous cases (see *C. & D.*, August 20, 1966, p. 157) the Court's decision was taken because the registered suppliers did not contest the proceedings. No contested cases have yet been heard. So far the Registrar of Restrictive Trading Agree-

ments has issued about 120 notices of reference to the Court, covering about three-quarters of the 500 classes of registered goods. The classes of goods in the latest lists, of interest to pharmacists, and the dates upon which resale price maintenance was abolished in respect of them are:—

BAN EFFECTIVE AS FROM OCTOBER 28, 1966

Cider and perry; both within heading 22-07 of the Brussels Nomenclature.

Cider vinegar; within heading 22-10 of the Brussels Nomenclature.

BAN EFFECTIVE AS FROM DECEMBER 2, 1966

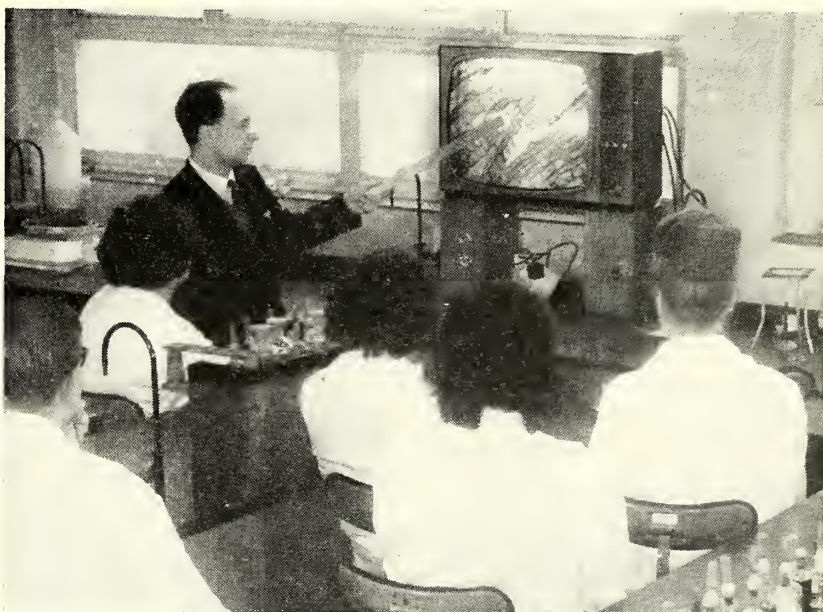
Royal jelly, being extract of queen bee honey, within heading 21-07 of the Brussels Nomenclature.

Materials and equipment for use by hairdressers in the permanent waving of hair the following:— Curlers and rollers of aluminium or wood; rubber protectors; rubber tubing; muslins of cotton; pad storage tins; pads of exothermic powder; spatulas of wood; bar clips of aluminium; clips, smoothing pins, trays and lids, dripping jars and formers, of plastic; sponges of foam plastic; all within headings 38-19, 39-07, 40-09, 40-14, 44-25, 44-28, 55-09, 73-40 or 76-16 of the Brussels Nomenclature; and cases and containers for any of the foregoing when sold therewith.

BAN EFFECTIVE AS FROM DECEMBER 21, 1966

Lavender plants within heading 06-02 of the Brussels Nomenclature.

Dried lavender within heading 12-07 of the Brussels Nomenclature.



KEEPING UP WITH THE TIMES: The school of pharmacy of the Liverpool College of Technology is now using a closed circuit television system as an aid in histology demonstrations. The illustration shows Mr. A. F. Stewart discussing the microscopy of cascara with a group of students.

Non-alcoholic cordials and black beer within headings 21-07 or 22-02 of the Brussels Nomenclature.

Waters, including spa waters and aerated waters, within heading 22-01 of the Brussels Nomenclature.

Concentrated fruit drinks (including fruit squashes and comminuted fruit drinks) within headings 20-06, 21-07 or 22-02 of the Brussels Nomenclature.

Fruit juices (excluding grape must), whether or not containing added sugar, but unfermented and not containing spirit, within heading 20-07 of the Brussels Nomenclature.

Articles of artificial resins and plastic materials classified under heading 39-07 of the Brussels Nomenclature, the following:— Portable hydrating contact lens carriers.

Preserving, hydrating and soaking solutions for contact lenses, all classified under heading 34-02 of the Brussels Nomenclature; outfits comprising such solutions together with wallets classified under heading 42-02, portable hydrating contact lens carriers classified under heading 39-07 and mirrors classified under heading 70-09 of the Brussels Nomenclature.

Laboratory, hygienic and pharmaceutical glassware the following:— Vacuum insulated glassware within heading 70-17 of the Brussels Nomenclature.

Sunglasses within heading 90-04 of the Brussels Nomenclature.

Balances of a sensitivity of five centigrammes or better, with or without their weights, within heading 90-15 of the Brussels Nomenclature; and spare and replacement parts therefor classified under any heading of the Brussels Nomenclature.

Imports of Chemicals

"LITTLE NEDDY" REPORT

A REPORT issued by the Economic Development Committee for the Chemical Industry on January 17 reviews the information on chemical imports available at present, analyses the reasons for them, assesses the progress made towards reducing the level of the underlying trend, and makes recommendations designed to promote further import saving. Considering major items only, plants recently completed or now under construction are expected to remove obvious temporary shortages and in addition to achieve about half the £30m. saving in the underlying trend of imports which the industry was asked to investigate. Some of the remaining half should be achieved by the rest of the industry's large programme of new investment. Difficulties in construction of plant and equipment are being examined by the Process Plant Working Party. In sectors in which imports have been identified, the major possibilities of U.K. manufacture have not been overlooked by the industry. The Chemical Industries Association is directing the industry's attention towards the numerous smaller products and within the limits set by the Restrictive Trade Practices Act, encouraging and assisting the industry to take action. Manufacturers who may be able to contribute to import saving are being recommended to seek the assistance of their trade association. More detailed statistics of imports are essential if opportunities of import saving are to be readily recognised, so the E.D.C. is continuing to impress on the Government the need for swift action through the Board of Trade working party on chemical statistics, which is examining ways and means

of improving the situation. The impact on investment of the less favourable outlook for the U.K. economy, and the lack of profitability of exports, are arousing concern. The trend needs to be arrested to avoid an upsurge in imports when economic growth is resumed. The report adds that the Restrictive Trade Practices Act is an impediment to import saving by co-operative action, the E.D.C. has suggested an administrative exemption from the provisions of the Act for approved schemes of co-operative action. Imports of pharmaceutical products in £ millions over recent years are given as: 1963, 6; 1964, 7; 1965, 11; January to October 1966, 11.

A Partly Private N.H.S?

A PROPOSAL TO END STATE MONOPOLY

A REPORT "Towards a Welfare Society," to be submitted to the British National Conference on Social Welfare in London in April, recommends (among other things) that health services demanding large outlay (for example large hospitals) might be provided partly by public authority. If hospitals cannot cover their capital and running costs by their charges, they might be partly financed by State capital and from grants, or by voluntary charitable contributions aided by tax refunds on single payments, or perhaps by re-distributing social insurance contributions to permit individual choice. "There is no case," declares the report, "for a monopolised health service that draws finance from every citizen, whether he uses it or not." To improve the personal relationship between doctor and patient, all patients should be able to pay for the services they expect from State or private suppliers. The report is published as Occasional Paper 13 by the Institute of Economic Affairs, 66a Eaton Square, London, S.W.1, price 6s.



FARMER-CEUTICAL? The badge adopted by the American Pharmaceutical Association for its 1967 annual meeting at Las Vegas, Nevada, April 9-14.

Exporting to America

U.S. SPEAKERS AT A SEMINAR

AMERICAN marketing experts are presenting a one-day seminar—an intensive study of the marketing, advertising, design and research techniques currently most effective in the United States—at the Europa Hotel, London, on February 23 to an audience of 350 senior marketing and export executives. As announced previously (*C. & D.*, December 17, 1966, p. 578), the aim is to help British manufacturers to capture a larger slice of the U.S. mar-

ket. The seminar has been devised for those manufacturers who so far do little in export business. Tickets may be obtained from the Conference Secretary, Export U.S.A., Cliffords Inn, London, E.C.4.

IRISH NEWS

THE REPUBLIC

Irish Chemical Industry

HOW SMALLER FIRMS MIGHT SURVIVE

THE realisation must come, said Mr. E. J. Dover (chairman Pharmaceutical and Allied Industries Adaptation Association, Ltd.) addressing Dublin Rotary Club on January 9, that smaller Irish chemical firms had little option but to combine their resources or associate with larger units. He said the Association had sixty-seven member companies, including manufacturers' sole agents, and the opportunities for Irish companies to associate or merge with other associate companies had never been greater. With the entry into the Common Market a distinct possibility, the problems highlighted in the report on the chemical industry by the Committee on Industrial Organisation would need to be dealt with. Since barely 15 per cent. of the total chemical industry in Ireland was wholly Irish-controlled, the smaller companies would find it increasingly difficult to meet the required standards and develop the financial resources necessary for survival as separate entities. Adaptation measures had now become a probability rather than a pious hope. The great variety of products manufactured by the industry provided scope for rationalisation and sub-contracting, and in that direction, plus the development of export markets, lay hope that the Association might yet achieve results. Although a single company within an overseas group had accounted for the greater proportion of the recent dramatic rise in pharmaceutical and allied exports — now valued at £6 millions annually — a general expansion had taken place. More than 50 per cent. of the gross output had been exported, and by 1970 that output was expected to be around £15m. It was hoped that that growth would be sufficient to induce companies already established in the Republic to remain under Common Market conditions. Losses amounting to £1m. had been incurred recently through transactions by spurious export companies and agents in Nigeria. It was necessary to know such countries really well, and to break into their markets was impossible unless companies were prepared to establish their own distribution system. Perhaps the best method would be by co-operative exporting.

IRISH BREVITIES

THE NORTH

PRESCRIPTIONS dispensed in Northern Ireland during October, 1966, numbered 861,101 (555,834 forms). Cost was £493,227 (average 137.47d. per prescription).

A NUMBER of lectures are being given in the lecture hall of the Pharmaceutical Society of Northern Ireland by

Professor K. B. Fraser (Professor of microbiology, Queen's University, Belfast). Remaining lectures (all at 8 p.m.) are on January 26, "How Organisms Cause Disease"; February 9, "Conquest of Microbial Diseases"; February 23, "Viruses."

NEWS IN BRIEF

A NIELSEN survey has shown that 82 per cent. of chemists' assistants are female [corrected note].

MR. R. S. Matthews has been appointed Private Secretary to the Minister of Health (Mr. Kenneth Robinson).

THE meeting of the Statutory Committee of the Pharmaceutical Society arranged for January 26 (*C. & D.*, January 7, p.1) has been cancelled.

DR. Frank and Mrs. Hartley were hosts at a party at the School of Pharmacy, University of London, on January 10, at which guests from many pharmaceutical and other professional organisations were present.

FIVE specialists in tuberculosis and chest diseases are among the six Commonwealth and overseas doctors awarded Smith & Nephew Fellowships for 1967. The sixth Fellow will study clinical pharmacology and therapeutics.

A GRANT of £50,000 has been made by the Wellcome Trust towards the establishment by the University of Aberdeen of a post-graduate research library on the site of the new medical school at Foresterhill.

THE precautionary measures to be taken when fumigating with carbon tetrachloride, ethylene dichloride and ethylene dibromide are given in a booklet prepared by the Ministry of Agriculture, Fisheries and Food (H.M. Stationery Office, price 1s. 6d.).

FOLLOWING an application for directions by the Registrar of Restrictive Trading Practices, the Restrictive Practices Court is expected on January 20 to indicate a date — possibly in 1968 — for the hearing of the case for the resale price maintenance of cosmetic and toilet preparations.

WESTMORLAND Executive Council have approved applications from the four chemists in Bowness and Windermere that one chemist each in Bowness and Windermere should be allowed to close on Thursdays during the months October to March. It was judged that an adequate pharmaceutical service would be provided by one chemist in each town, opening on Thursday mornings, with the usual rota hour on Thursday evenings. The new system commenced on January 19.

SYNTHETIC or even natural products should not be added to baby foods unless absolutely necessary, according to the Expert Committee on Nutrition of the Food and Agriculture and World Health Organisations. Even starch and egg powder should be avoided because of toxic hazards. Labels on canned baby food should indicate ingredients so as to avoid allergic reactions in some babies. No additives at all should be permitted in fresh milk unless there was no other alternative, as in certain parts of Africa.

TOPICAL REFLECTIONS

By Xrayser

Falling intake

Your editorial analysis (p. 35) of the problems associated with recruitment into pharmacy should be read and digested by all who have an interest in the profession and its future. The figures published show that there has been a reduced intake over the past year and, while not disastrous, that must give rise to concern. I am in complete agreement with your view that a lowering of entrance standards is not a solution. To make entrance easier, only to have the student falling down at a later stage of his academic career, is manifestly no answer to the problem from any standpoint, and particularly that of the aspiring pharmacist. The present course leading to a degree is an extensive and arduous one, but no more extensive and arduous than is necessary to produce a pharmacist capable of coping with the demands exacted by present-day knowledge. It may be, as has been stated, that only about a third of the income of the pharmacist accrues from the professional part of his business, but that is no argument, for even a much smaller proportion would still call for the same high degree of skill and knowledge. The responsibilities increase with the passage of the years, and the scope of the educational curriculum must always be slightly in advance of current requirements. Pharmacy has been well served in that direction, though there have been critics of the educational policy on matters of detail. The fact remains that the graduate of today is adequately equipped to understand his chosen vocation and may, with little difficulty, take his place in any of the branches of pharmacy he may fancy. But the problem of intake is not the only one facing pharmacy, for there remains the vitally important question of attracting a sufficient number of those graduating to devote their career to general practice. And it may be that that aspect, in the long run, will present greater problems than those immediately visible in the figures published of current intake. As you so rightly say, it falls to those who have gone before to provide, maintain and safeguard the opportunity of fulfilling the destiny of the graduate-to-be.

Atmosphere

In the circumstances, we are faced with a glaring paradox. The fact has to be faced that those of an earlier generation spent their days in surroundings that were in keeping with the dignity of a profession. Today there is, in some pharmacies at least, little to suggest that pharmacy is primarily, if at all, concerned with the duty of helping the sick. One might, indeed, enlarge to little purpose on the changes that have led to the incongruous situation under which the highly trained university graduate takes his place in a much less professional atmosphere than that of an earlier generation that did not have the advantage of a university education. His earlier counterpart may even have worn a white apron at the counter. It is generally accepted — and even the most rabid of enthusiasts for raising pharmaceutical standards will not disagree, that pure and wholly professional practice is—in present circumstances, not an economic possibility. But every effort must be made to lead it in that direction by a carefully selected progression. That is essential to the future of the profession—to its standing with the public, the other professions and the Government, as your leader emphasises. Not least it is essential to intake and to what you rightly call "maintaining the succession."

Dignity

The next few years will demand a radical rethinking of the whole position of pharmacy if it is to be seen to be taking itself seriously. It took a long time to evolve from its origins in grocery and spicery, to organise itself along a well defined path into a calling that recognised its responsibilities and the need for dignity. There is still a full recognition of the responsibilities, legal and moral, but, in my view, the sense of dignity has declined in proportion to the growth of extraneous and non-pharmaceutical commerce, which has tended to obscure the basic function of the pharmacist. The erosion must be halted, otherwise the prospective pharmacist will look elsewhere for a career.

BRITISH PHARMACEUTICAL CODEX, 1968

Proposed deletions and additions

THE following are tentative lists of deletions and additions for the British Pharmaceutical Codex, 1968, which will come into effect six months after publication. Entries marked with an asterisk are subject to confirmation.

Deletions

PART I. GENERAL MONOGRAPHS

Ammonium bromide. Arsenic trioxide. Barbitone. Benzthiazide. Bialamical hydrochloride. Bismuth glycolylarsanilate. Bismuth oxychloride. Bismuth sodium tartrate. Buchu. Calcium glycerophosphate. Calcium hypophosphate. Carbarsone. Chiniofon sodium. Cinchona. Colocynth. Cyclocoumarol. Dibutyl phthalate. Diethazine hydrochloride. Diloxanide. Disulfiram. Ferric glycerophosphate. Gall. Liquid glucose. Glycerophosphoric acid. Hexadimethrine bromide. Hexamethonium tartrate. Hydnocarpus oil, ethyl esters of. Hydrallazine hydrochloride. Hypophosphorous acid, dilute. Ipomoea. Ipomoea resin. Jalap. Jalap resin. Lard. Leptazol. Linseed oil. Magnesium glycerophosphate. Manganese hypophosphate. Menaphthone. Mecaprine methanesulphonate. Mercury. Methylphenobarbitone. Neoarsphenamine. Oxophenarsine hydrochloride. Pholcodine tartrate. Picrotoxin. Pipamazine. Piperoxan hydrochloride. Pipradol hydrochloride. Potassium hypophosphite. Prednisolamate hydrochloride. Prednisolone acetate. Quinine. Santonin. Soap, curd. Soap, hard. Sodium anoxynaphthionate. Sodium glycerophosphate solution. Sodium hypophosphite. Urethane. Valerian.

PART II. IMMUNOLOGICAL AND RELATED PRODUCTS

Dick control. Dick test toxin. Scarlet fever prophylactic

PART V. SURGICAL DRESSINGS

Flannel bandage. Muslin bandage. Bleached calico. Absorbent rayon gauze. X-ray-detectable absorbent rayon gauze. Rayon gauze pad. X-ray-detectable rayon gauze pad. Absorbent rayon lint. Absorbent muslin.

PART VI. FORMULARY

Dusting powder of
*boric acid
*salicylic acid, compound
*zinc, compound
Ear-drops of boric acid
Emulsion of chloroform
Enema of turpentine
Extract of
colocynth, compound
nux vomica, dry
stramonium, dry
valerian, liquid
Eye ointment of physostigmine
Glycerin of starch
Injection of
bismuth oxychloride
bismuth sodium tartrate
leptazol
mecaprine methanesulphonate
neoarsphenamine
oxophenarsine hydrochloride
Infusion of valerian, concentrated
Irrigation of lactic acid
Mixture of
acetylsalicylic acid
acetylsalicylic acid for infants
potassium bromide
potassium bromide and chloral
potassium bromide and nux vomica
potassium bromide and valerian
strychnine
strychnine and iron

Ointment of
*boric acid
gall and opium
Pills of
colocynth and hyoscyamus
colocynth, compound
rhubarb, compound
Powder of kaolin, compound
Solution, arsenical
Solution of
ferric hypophosphite
ferric sulphate
quinine, ammoniated
sodium benzoate and chlorocresol
strychnine hydrochloride
sulphan blue with tartrazine
Syrup of
glycerophosphates, compound
hypophosphites, compound
liquid glucose
Tablets of
barbitone
carbarsone
cascara, compound
chiniofon sodium
colocynth and jalap, compound
disulfiram
methylphenobarbitone
phenolphthalein, compound
potassium chlorate
sodium salicylate
stramonium
Tincture of valerian, ammoniated.

Additions

PART I. GENERAL MONOGRAPHS

Aldosterone. Alginic acid. Aluminium magnesium silicate. Aluminium monostearate. Amitriptyline hydrochloride. Betamethasone sodium phosphate. Betamethasone valerate. Calcium alginate. Calcium sulphate, hydrated. Capreomycin sulphate. Carbopol. Cellulose acetate phthalate. Cellulose, microcrystalline. Cephaloridine. Cetyl alcohol. Chloramphenicol sodium succinate. Chlordiazepoxide. Chlordiazepoxide hydrochloride. Clefamide. Cloquinol. Colistin sulphate. Colistin sulphomethate sodium. Cyclopenthiiazide. Cyclopentolate hydrochloride. Cyproheptadine hydrochloride. Desferrioxamine mesylate. Desipramine hydrochloride. Dexamethasone sodium phosphate. Dextran 40 injection. Dextran 110 injection. Dextromoramide. Dextropropoxyphene hydrochloride. Dextropropoxyphene napsylate. Diazepam. Dihydrocodeine acid tartrate. Dihydrochloride. Diethyl sodium sulphosuccinate. Dydrogesterone. Ecothiopate iodine. Erythromycin ethyl carbonate. Erythromycin stearate. Ethacrynic acid. Ethamivan. Ethchlorvynol. Ethionamide. Ferrous succinate. Fructose. Frusemide. Fusidic acid, diethanolamine salt. Guaiphenesin. Hydragraphen solution. Hydroxypropylmethylcellulose. Indomethacin. Biphasic insulin injection. Neutral insulin injection. Iothalamic acid. Iron dextran injection. Iron sorbitol injection. Lymecycline. Lynoestrenol. Macrogl 6000. Magnesium chloride. Mepazine. Meglumine iohalamate injection. Metaraminol tartrate. Methohexitone injection. Methoserpidine. Methotrexate. Methoxyburane. Methylprednisolone acetate. Nalidixic acid. Nandrolone decanoate. Nealbarbitone. Nialamide. Niclosamide. Nicoumalon. Norethisterone acetate. Nortryptiline hydrochloride. Fresh bitter-orange peel. Orciprenaline sulphate. Oxyphenisatin diacetate. Oxyphenbutazone. Oxyphenicylimine hydrochloride. Paramethasone acetate. Paromomycin sulphate. Phensuximide. Phenylpropanolamine hydrochloride. Phenytoin. Polysorbates 20, 60 and 80. Polyvidone. Potassium sorbate. Propranolol hydrochloride. Proxymetacaine hydrochloride. Pseudoephedrine hydrochloride. Pyrazinamide.

Silicon dioxide. Sodium acetate. Sodium iodohippurate (¹³¹I). Sodium iohalamate injection. Sodium metrizoate. Sorbic acid. Sorbitan monolaurate. Sorbitan mono-oleate. Sorbitan monostearate. Sulphamethoxydiazine. Sulphomycin sodium. Sulthiame.

Tetracycline. Thiotepa. Tranlycypromine sulphate. Triamterene. Tricyclamol hydrochloride. Viprynum embonate.

PART II. IMMUNOLOGICAL AND RELATED PRODUCTS

Anthrax vaccine. Diphtheria, tetanus, pertussis and poliomyelitis vaccine. Diphtheria, tetanus and poliomyelitis vaccine. Measles vaccine (inactivated). Measles vaccine (live attenuated).

PART V. SURGICAL DRESSINGS

Cotton-crepe bandage.

PART VI. FORMULARY

Capsules
phensuximide
Cream
betamethasone valerate
chlorphenesin
cloquinol
fluocinolone
triamcinolone
Dusting-powder
chlorhexidine
chlorphenesin
Hexachlorophane
Hydrocortisone and neomycin ear-drops
Elixir,
chlorpheniramine, paediatric
choline theophyllinate, paediatric
dichloralphenazone, paediatric
dicyclomine
diphenhydramine, paediatric
ethamivan, paediatric
ethosuximide
mepyrmine, paediatric
oriprenaline
phenoxymethylpenicillin, paediatric
promethazine, paediatric
tricrofos
trimeprazine, paediatric
trimeprazine, paediatric, strong
Paraldehyde enema
Eye-drops
cyclopentolate
ecothiopate
hydrocortisone
hydrocortisone and neomycin
hydroxypropylmethylcellulose
proxymetacaine
chlortetracycline
Bephenium hydroxynaphthoate granules
Injection
benethamine penicillin, fortified
benzathine penicillin, fortified
calciferol
trimeprazine
vitamins B and C
Blackcurrant juice, concentrated
Lotion
sulphur, compound
triamcinolone
Betamethasone lozenges
Mixture
ampicillin
chloramphenicol, paediatric
erythromycin, paediatric
ferrous fumarate
furazolidone and kaolin
fusidate, paediatric
nitrofurantoin
novobiocin
nystatin, paediatric
phenoxymethylpenicillin, paediatric
phenytoin, paediatric
primidone mixture
tetracycline, paediatric
viprynum, paediatric
Ointment
betamethasone valerate
chlortetracycline
coal tar and salicylic acid
fluocinolone
neomycin and bacitracin
triamcinolone
Brilliant green and crystal violet paint
Triamcinolone dental paste
Hydragraphen pessaries

Haemodialysis solutions
 Intraperitoneal dialysis solutions
 Sodium citrate solution for bladder irrigation,
 sterile
 Sodium hypochlorite solution, concentrated
 Hydrocortisone suppositories
 Lemon syrup
 Tablets
 ampicillin, paediatric
 chlorthalidone
 clemastine
 dihydrocodeine acid tartrate
 manomustine
 nalidixic acid
 quinine dihydrochloride
 thiopropazate.

LEGAL REPORTS

Winding-up Order

AN order for the compulsory winding-up of Evans Drug Store, Ltd., whose registered office is at 10 Station Road, South Norwood, London, S.E., was made by Mr. Justice Pennycuik in the High Court on January 16 on the petition of William Dunster & Co., Ltd., 328 Kennington Lane, London, S.E.11, judgment creditors for £5,757. Counsel for the petitioners said he also appeared for Addis, Ltd., creditors for £54, who supported the petition. The petition was also supported by the Inland Revenue.

Security Officer Imprisoned

CONSECUTIVE sentences of six months' imprisonment were passed on Albert Arthur Brooks, a security officer, 111 Hampden Way, London, N.14, at Old Street Court, London, on January 13, after he had pleaded guilty to stealing a large quantity of cosmetics belonging to his employers, Innova (England), Ltd., 436 Essex Road, London, N.1, on or before November 22, 1966. The property in the two charges was valued at £2,674. A police officer said that all the property was found in Brooks's home. While the officers were removing cosmetics Brooks, who was sitting in his car, was seen to drink something from a bottle. It proved to be a cleansing fluid and hospital treatment was necessary. The officer explained that Brooks had been employed by the company as a security officer and departmental manager. He had the keys of the premises and went there during the week-ends. The stolen property filled a police van. The cosmetics mentioned in a second charge related to property that three other people had been charged with receiving. Defence counsel said the trouble had started when it became known by Brooks's friends that he was working for a cosmetic manufacturer. Somebody asked him to get cosmetics, and at first he took out an item such as a lipstick or a powder puff. "He started and it became too easy," counsel added. "What started off as an idle taking to impress developed into the amount on the list of property stolen." Whether, when the police arrived, Brooks panicked and drank the fluid instead of water, which was in a nearby container, or whether he drank it deliberately—the police had suggested as an act of despair—did not matter. The result was the same. The events of recent months had seriously shortened his expectancy of life. The magistrate said that, when one stripped the

matter of emotion and looked at it fairly and dispassionately, it amounted to the fact that for over twenty years Brooks had been a trusted servant of the company, which had treated him well. Over a period of time he had again and again robbed those whom he had a duty to protect.

COMPANY NEWS

Previous year's figures in parentheses

GULA INVESTMENTS, LTD.—The £5m. property group which also controls Lewis & Burrows, Ltd., is going into voluntary liquidation following completion of the sale of its property interests. The decision has been taken, the directors say, because of the impact of the changes in the taxation system. After all expenses are paid, investors are expected to get a minimum distribution of 10s. 6d. a share. Lewis & Burrows, Ltd., the remaining asset, is being sold to certain directors who hold a controlling interest in Gula.

YARDLEY & CO., LTD.—Shareholders have now been advised by the directors to reject the offer made by British-American Tobacco Co., Ltd. (C. & D., January 7, p. 5). Giving reasons the chairman (Mr. T. L. Gardner) outlines the growth rate of the company and adds that it is intended to raise the dividend "appropriately" both for 1967 and the following years. It is estimated the profits for 1966 will be £2,110,000 (against £2,061,000 for 1965) and forecasts £2.5 millions for 1967. Meanwhile the Board of Trade says that it does not intend to refer the proposed acquisition to the Monopolies Commission.

FARBENFABRIKEN BAYER A.G., Leverkusen, W. Germany.—The chairman (Professor Hansen) says that export prospects for 1967 are favourable and he thinks the home market will expand after some stagnation. Turnover of the parent company in 1966 rose 8.5 per cent. to Dm. 4,200 million, while group turnover rose 9 per cent. to Dm. 5,900 million. The parent's exports expanded 17 per cent. to Dm. 2,200 million, accounting for 52 per cent. of total turnover (against 48.3 per cent. previously).

Voluntary Liquidations

G. S. DOWNIE, LTD., retail chemists, 11 New Road, Mytholmroyd, Halifax. Liquidator: J. D. Ayrton, 6 Lord Street, Halifax.

W. SUTTON & CO., (DRUGGISTS SUNDRIES LONDON), LTD.—The company, with registered offices at Horse Shoe Lane, Enfield, Middlesex, has gone into voluntary liquidation with a deficiency of £48,355 as regards creditors, subject to costs of receivership and liquidation. That was revealed at a meeting of creditors held on January 12. Mr. A. J. Neal (joint managing director), presiding, when a statement of affairs was submitted showing unsecured liabilities amounting to £136,073, due to about 550 creditors. Assets, after allowing £33,538 in respect of a debenture and £14,040 to preferential creditors, were estimated to realise £87,718. Issued share capital of the company was £23,402 and the

total deficiency so far as the members were concerned was £71,757. The directors attributed the failure of the company to rising costs in respect of wages and transport, extreme competition, and inability to take advantage of cash discounts offered. Mr. Neal stated that a contributory factor was the illness and subsequent death of the late chairman. Mr. J. H. Wilson, F.C.A., who was appointed receiver by debenture holders in November 1966 said that since his appointment he had continued trading for a few weeks in the hopes of finding a purchaser but no offers had been received and, therefore, he had no alternative but to close the business. Trading figures showed in 1958 a net profit of £332 on turnover of £693,000; in 1959 net loss £5,719 on £692,000; 1960, loss £15,311 on £650,000; 1961 loss £9,533 on £658,000; 1962, loss £8,074 on £592,000; 1963, profit £2,839 on £586,000; 1964, loss £5,160 on £581,000; nine months to September 1965, loss £16,905 on £366,000 and during receivership, loss £30,900 on £431,000. Creditors resolved to confirm the voluntary winding-up of the company with Mr. J. H. Wilson, F.C.A., Moore, Stephens & Co., Bucklersbury House, Bucklersbury, London, E.C.4, and Mr. R. P. Booth, F.C.A., Booth White & Co., 1 Wardrobe Place, Carter Lane, London, E.C.4, as joint liquidators. A committee of inspection was also appointed comprising representatives of Eli Lilly & Co., Ltd.; Fisons Pharmaceuticals, Ltd.; Cheshbrough-Ponds, Ltd.; and J. Samuels & Co., Ltd., together with Mr. B. Mills (W. H. Cork, Gully & Co.), on behalf of certain creditors.

BUSINESS CHANGES

HENRI L. JACCAZ & CO., 32 Shaftesbury Avenue, London, W.1, state that, when their head office telephone number (Gerrard 6428) is not available, they can be obtained at 654-4454 (in place of Livingstone 2140).

Appointments

WILLIAM R. WARNER & CO., LTD., Eastleigh, Hants, have appointed Mr. P. T. Hairsnape marketing manager of their ethical division.

ROCHE PRODUCTS, LTD., have appointed Mr. J. S. Johnston, Ph.C., 20 Shandon Park, Ballymena, co. Antrim, Northern Ireland, their representative in the counties of Antrim, Tyrone and Londonderry with parts of Belfast (postal districts 11-15).

OVERSEAS VISITS

DR. J. GERRARD (managing director, Cuxson, Gerrard & Co., Ltd.) is to accompany the Birmingham Chamber of Commerce Trade Mission visiting East and Central Africa, January 22 to February 22. Dr. Gerrard's intention is to study the medical, surgical and pharmaceutical requirements of the countries concerned for health services, hospitals, retailers, doctors and factory first aid, with a view to supplying products particularly suitable for local conditions.

PERSONALITIES

MR. SCRIVEN J. TURNER has been adopted to the council of the Proprietary Articles Trade Association in place of Mr. E. G. Smith, who has resigned.

PROFESSOR SIR EDWARD WAYNE (Regius Professor of the



Practice of Medicine, Glasgow University) who has been appointed chairman of the Advisory Committee on Drug Dependence, taking the place of the late Lord Brain, who was nominated its chairman, is a past chairman of the British Pharmacopoeia Commission. He was chairman of the British Medical Association Committee on alcohol and road accidents. He is also a physician to the Queen in Scotland. From 1934 to 1952 Professor Wayne was professor of pharmacology and therapeutics, University of Sheffield.

DR. AUSTIN SMITH chairman and chief executive officer of Parke, Davis



& Co., Detroit, U.S.A., since January 1 (see C. & D., January 14, p. 29), joined the company's board in December 1965 and became vice-chairman in January 1966. Born in Ontario, Canada, he received his degree in medicine from Queen's University in 1938

and obtained a master's degree two years later. From 1959 to 1965 Dr. Smith was president of the American Pharmaceutical Manufacturers' Association. Between 1940 and 1958 he was with the American Medical Association and served as editor and managing publisher of the *Journal of the American Medical Association* and editor-in-chief of the American Medical Association speciality journals, 1949-1958.

DR. F. A. ROBINSON, D.Sc., LL.B., F.R.I.C., has been appointed



professorial fellow in biochemistry of the University College of South Wales and Monmouthshire and an honorary professor of the University of Wales. The appointment is one of the first to be made to implement the

Robbins recommendation that steps should be taken to forge stronger links between industry and the Universities. Professor Robinson is managing director, Twyford Laboratories, Ltd., and a director of the Crookes Laboratories, Ltd., the former being currently concerned with research on new drugs, immunology, animal breeding and plant propagation, and the production of veterinary vaccines. Professor Robinson is a graduate in applied chemistry of the University of Manchester and was awarded his D.Sc. on the basis of published work relating mainly to bacterial growth factors, bacterial growth inhibitors and applied biochemistry. He has been closely associated for most of his career with the pharmaceutical industry. He also developed the diet now in use for the prevention of phenylketonuria, and was involved in the commercial development of lungworm vaccine for cattle. Professor Robinson served on the chemistry research board of the former Department of Scientific and Industrial Research, on the Medical Research Council's committee for penicillin synthesis and on committees of the British Pharmacopoeia and British Pharmaceutical Codex. He is at present a member of the advisory committee appointed under the Therapeutic Substances Act, 1956. Prior to joining Twyford Laboratories in 1960 he was a director of research at Allen & Hanburys, Ltd., for twelve years.

BIRTHS

WADE.—At 8 Riverside Gardens, Enfield, Middlesex, on January 11 to Diana (née Pye), B.Pharm., M.P.S., wife of Ainley Wade, B.Pharm., M.P.S., a daughter (Margaret Helen).

DEATHS

ANCHOR.—On January 2, Mr. Harold Anchor, M.P.S., Willscot, Old Ludlow Road, Little Stretton, Church Stretton, Shropshire, aged seventy-one. Mr. Anchor qualified in 1920.

CARR.—On December 25, 1966, Mr. Bertram Ostcliffe Carr, M.P.S., 16 Isaacs Hill, Cleethorpes, Lincs, aged eighty-one. Mr. Carr qualified in 1907.

DUNKERLEY.—On January 14, Mr. Frank Dunkerley, Tilstone House,



Tilstone Fearnall, Tarporley, Cheshire, aged sixty-four. Mr. Dunkerley was the founder of Calmic, Ltd., Crewe, and was the chairman of the company from its inception in 1932 until his appointment as president in December 1966.

Born in Oldham, Lancs, where his family had been associated with the cotton industry for many years, Mr. Dunkerley was educated at Uppingham and qualified as a solicitor in 1926. He started his own practice in 1928 but retired from full-time practice in 1956 to become fully responsible for Calmic, Ltd.

LIGHTFOOT.—On January 3, Mrs. Joan Lightfoot, M.P.S., 6 Carlton Gardens, Stanwix, Carlisle, Cumberland. Mrs. Lightfoot qualified in 1955.

PITCHFORTH.—On December 27, 1966, Mr. Rupert Johnson Pitchforth, M.P.S., 3 Market Place, Chalfont St. Peter, Bucks. Mr. Pitchforth qualified in 1915.

RICHARDS.—On December 30, 1966, Miss Louisa Richards, 12 Knights Avenue, Tettenhall, Wolverhampton. Miss Richards qualified as a chemist and druggist in 1925 and retired in 1964.

SMITH.—On December 31, 1966, Mr. Evelyn Arthur Smith, M.P.S., 10 Elles Avenue, Merrow, Guildford, Surrey. Mr. Smith qualified in 1915. He was in business for 30 years at Camberley, Surrey, in partnership with his brother.

SMITH.—On December 29, 1966, William Altham Smith, M.P.S., Villette, Moor Road, Leyburn, Yorks. Mr. Smith qualified in 1921.

WATSON.—On January 11 Colonel S. Watson, D.S.O., M.C., B.Sc., who was president of the Proprietary Articles Trade Association in 1930 and again in 1942. Colonel Watson joined the wholesale section of the council of the Proprietary Articles Trade Association in January 1922 as the representative of Jas. Woolley, Sons & Co., Ltd. He became a member of the executive committee in 1924, and was made an honorary member of council on his retirement in January 1956.

Mr. Alan Duckworth writes: Although eleven years have passed since Colonel Watson's retirement and his consequent withdrawal from participation in the affairs of the Association of the British Pharmaceutical Industry, his work for the Association and its predecessor, the Wholesale Drug Trade Association, has not been forgotten by those who were associated with him. Colonel Watson was first elected to the council of the W.D.T.A. in 1935, and only two years later became its chairman. He was reappointed for 1938, and for the next ten years continued as a member of the council. He helped to form the wholesale distributors' group in 1939 and served on its committee until his retirement from business in 1956. In January 1953 the group had suffered a serious loss by the death of its chairman (Mr. F. J. Smith of Sangers, Ltd.). That was a critical time for the wholesalers, who had just embarked on a campaign for an increased discount. Colonel Watson agreed to take on the chairmanship and remained in office, despite periods of ill-health, until an acceptable agreement had been reached with the manufacturers. When he retired from business the A.B.P.I., took the earliest possible opportunity of conferring honorary membership upon him for his outstanding services. In addition to being highly esteemed for his abilities and his devotion to the interests of his fellow-members, Colonel Watson was held in warm affection for his personal qualities. His sincerity and abundant kindness, coupled with his sense of humour, made his company enjoyable and friendship prized.

NEW PRODUCTS AND PACKS

PHARMACEUTICAL SPECIALITIES

For Inflamed or Infected Ears.—CIBA Laboratories, Ltd., Horsham, Sussex, have launched a new speciality Locorten-Vioform ear drops in 7.5-mil plastic controlled-drop "dispenser" for the treatment of otitis externa and chronic otitis media. The use of product is claimed to ensure that the natural acidity of the auditory canal is maintained during therapy.

Single-dose Influenza Vaccines.—The Crookes Laboratories, Ltd., Basingstoke, Hants, market two 1-mil packs of Influvac each containing a single dose of influenza vaccine. They are a 1-mil ampoule and a 1-mil disposable syringe pack with subcutaneous needle. The product conforms with the British Pharmacopoeia specification for inactivated influenza virus vaccine and may be dispensed on prescriptions calling for influenza vaccine, British National Formulary.

Once-a-day Tetracycline.—Principal advantage claimed by Bristol Laboratories, Ltd., Astronaut House, Feltham, Middlesex, for their new speciality Tetrex PMT is that it enables one day's therapy to be given usually in a single injection. A rapid onset of therapeutic effect is understood to be accompanied by prolonged activity. Intramuscular and intravenous presentations are available, both being single-dose vials of 350 mgm. (the normal adult daily dose) for reconstitution. Incorporating a new tetracycline derivative — *N*-(1-pyrrolidinylmethyl) tetracycline nitrate (approved name rolitetracycline nitrate)—Tetrex PMT is described as being effective against a wide variety of infections caused by tetracycline-sensitive organisms, including rickettsia and certain large viruses. [In a previous paragraph it was suggested that Tetrex PMT was suitable for patients allergic to tetracycline. That is incorrect. We regret any inconvenience the error may have caused to readers or Messrs. Bristol.—EDITOR].

OVER-THE-COUNTER MEDICINALS

Worm Elixir.—Cupal, Ltd., Pharmaceutical Laboratories, Blackburn, Lancs, have added to their range of products, under the name Rayglo, a worm elixir.

NURSERY PRODUCTS

Petroleum Jelly in Lightweight Jar.—Chesebrough-Pond's, Ltd., Victoria Road, London, N.W.10, have introduced, especially for mothers of young babies who use the product to prevent "nappy rash," a new nursery

pack of their Vaseline brand petroleum jelly. The jar is made of plastic, thus eliminating the problem of splintering glass if it should happen to be dropped. The new pack weighs little more than half the normal glass jar—another advantage mothers will appreciate. The jars are decorated with nursery transfers (rabbit, squirrel, fish and swan) in blue or pink and make attractive storage jars when empty.

COSMETICS AND TOILETRIES

New-look Medicated Shampoo.—A new medicated shampoo, new Loxene "Extra", by F. W. Hampshire & Co., Ltd., Sunnysdale, Derby, is claimed "extra active against dandruff" and to leave the hair "extra clean." The container is a bottle in carton of arresting design.

Creamy Massage.—Beecham Proprietary Medicines, Ltd., St. Helens, Lancs, are marketing in Britain a product that has proved popular in Canada. The product, Minard's massage, is described as "strong and fast-acting" in the relief of rheumatic pain, muscular aches and tired feet. The white creamy liquid is massaged gently into the skin, "spreading comfort into your body".

"Fun-type" Design.—Dorothy Gray, Ltd., 45 Conduit Street, London, W.1, are inviting young women of every age to "go dotty" with two "deliciously dotty" lipsticks (Dotty Orange and Dotty Pink), and Lights-up yellow in individual "dotty" case. The company's three most popular portrait foundation colours are treated to a "dotty" carton, and the three most popular cream powders have flipped their lids to "go dotty."

Make-up "Sheen".—Estée Lauder Cosmetics, Ltd., 18 Davies Street, London, W.1, are promoting a new "lustrous" approach to make-up, based on "Youth Sheen", an iridescent translucent liquid that is spread over the skin after foundation and powder have been applied. "Youth Sheen" is in three shades, "Dawn" (ivory), "Noon" (beige) and "Tropic" (bronze). A powdered version of the product in miniature compact with puff is formulated to light up cheeks, chin or forehead.

SUNDRIES

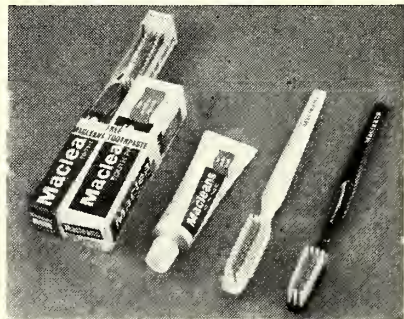
Beach and Beauty Accessories.—Jackel & Co., Ltd., Kitty Brewster

Estate, Blyth, Northumberland, are distributors of a series of beauty holdalls made by Castlecrafts in pale pink, yellow or blue gingham. The range includes beauty holdalls, cos-



metic purses, curler caddy, boudoir cap, make-up cape, cotton wool container, pocket tissue holder and tissue box holder. From the end of January each Castlecrafts beauty holdall will contain a free facecloth sponge wet-pack.

"Aggressively Promoted" Toothbrushes.—Beecham Toiletory Division, Great West Road, Brentford, Middlesex, are now distributing nationally a new Macleans toothbrush which, they state, is being "promoted aggressively". A banded "launch" pack, comprises an individually boxed toothbrush and free tube of Macleans tooth-paste containing 39 gm. At the recommended price of 1s. 11d. the toothbrush



and substantial quantity of tooth-paste represent, the makers claim, "exceptional value for the shopper". The brush is of dual-strength type with firm centre and softer outer tufts of Du Pont Tynex nylon. Tynex is claimed to resist the softening effect of hot water, thereby acting more effectively than other types of nylon.



VICTORY ON THE AIR: In the first programme of the current series of television "Top Firm" quizzes, broadcast by the B.B.C. on January 11, a team from Eylure, Ltd., Welwyn Garden City, Herts, defeated by 115 marks to 95 a team from Ford Motor Co., Ltd., team. The Eylure team now goes into the quarter-final (expected some time in March). In the present series of the programme all the teams come from companies that have received the Queen's Award to Industry.



TRADE NOTES

Free "Merchandiser".—Gillette Safety Razor Co., Great West Road, Brentford, Middlesex, are offering free till February 23 a special six-peg "merchandiser" for the "Super Silver" blades.

Change of Distributor.—Kalium Pet Products, Ltd., Redditch, Worcs, state that their animal products Extra-Tail, Pro-Tekt-Her, Clarox, Vigamol and Sham-poodle are now distributed in Great Britain and Northern Ireland by Vestric, Ltd., Runcorn, Ches.

An 18-oz. Aerosol.—F. W. Hampshire & Co., Ltd., Sunnysdale, Derby, have introduced an aerosol of their Cossack hairdressing for men. The new pack offers a saving to the consumer of 4s. over the price of three 6-oz. cans.

Ten More Tablets in Pack.—G. D. Searle & Co., Ltd., Lane End Road, High Wycombe, Bucks., state that the current Aldactone-A thirty tablet pack has been replaced by a pack containing forty tablets in order to offer a more convenient dispensing unit for a 10-day course of four tablets a day.

Change of Distributor.—Britanol, Ltd. (a jointly owned subsidiary of Cussons Group, Ltd., and Sandoz Products, Ltd.) are now sole United Kingdom agents for the marketing and distribution of Jordan toothbrushes. General manager of the company is Mr. G. J. B. Haldane.

Claims for Rebate.—Glaxo Laboratories, Ltd., Greenford, Middlesex, state that claims for rebates on stocks of Nalx tablets, 50 mgm., in 100's and 500's and Efcortelan soluble injection, 100 mgm. (not Neo Nalx or Neo Nalx-K), held at January 21, should be sent to the company's home sales department.

Two Selling Divisions.—Chesebrough-Pond's, Ltd., Victoria Road, London, N.W.10, have formed a toiletry and beauty-aid division to take over the selling of Vaseline brand, Pond's beauty and Odorono products, Q-Tips and Clearway; and a cosmetic and health division to handle Cutex and L'Onglex beauty products, Angel Face cosmetics and Complex D.

Medicinal Uses Allowed.—Liga Food Products (U.K.), Ltd., Liga House, 23 Saxby Street, Leicester, point out that the Standing Joint Committee on the Classification of Proprietary Preparations has advised that Aminex (low-protein Liga) should be prescribable on Form EC 10 for all patients with phenylketonuria and tyrosinaemia and that gluten-free liga should be prescribable for all patients with coeliac disease. In all other circumstances the preparations should be regarded as foods and not prescribable on Form EC 10.

Bonus Offers

BRITISH-AMERICAN OPTICAL CO., LTD. (Cool-ray division), Colonial Way, Radlett Road, Watford, Herts. Arrid and Nair. Thirty packs invoiced as twenty-four. Until April 1.

CHESEBROUGH-POND'S, LTD., Victoria Road, London, N.W.10. Vaseline brand

petroleum jelly. Twelve new lightweight jars invoiced as eleven. Until February 28.

COTY (ENGLAND), LTD. 3 Stratford Place, London, W.1. *Imprévu* hair spray. Thirteen invoiced as twelve. *L'Aimant* perfumed shampoo, fourteen invoiced as twelve.

MACARTHYS, LTD., Chesham House, Chesham Close, Romford, Essex. Syrup of honey pine. 3 doz. less 5 per cent.; 6 doz. less 7½ per cent.; 12 doz. less 10 per cent.

PHARMACEUTICAL SPECIALITIES (MAY & BAKER), LTD., Dagenham, Essex. Phensedyl cough linctus (125 mls), Phensedyl capsules (container of twenty-five), Tixylix children's cough linctus (125 mls), and Planidets lozenges (container of twelve). Bonus

offer (see *C. & D.*, October 29, 1966, p. 421) closes February 28.

Premium Offers

HELENA RUBINSTEIN, LTD., 3 Grafton Street, London, W.1. Special-size Skin Dew cream with emulsion and cleanser concentrate and eye make-up remover. Until February 11.

BEECHAM TOILETRY DIVISION, Great West Road, Brentford, Middlesex, Bristow's lanolin cream shampoo in bottles. Fourpence off standard size; sevenpence off "economy" size. Till February 20.

EVER-READY PERSONNA, 26 Bedford Row, London, W.C.1. Five premium-edge blades free with Ever-Ready Gem "push-button" single-edge razor. (Introductory offer). Free razor with seven Super stainless blades.

GILLETTE SAFETY RAZOR CO., Great West Road, Isleworth, Middlesex. "Super-Silver" blades. Six for the price of five. Tube Shave creams (regular, menthol and brushless) fourpence off (till February 23).

Correspondence

Letters when received must bear the name and address of the sender, not necessarily for publication. The Editor does not hold himself responsible for the views expressed.

Bargain Basement

SIR,—I note a local cut price grocer in this town sells Optrose 4s. 6d. size at the knock-out price of 2s. When are N.P.U., Ltd., going to get round to doing a rose-hip syrup?

G. L. BEET,
Morecambe, Lancs

Tit for Tat

SIR,—Whilst the Commission's report on the inquiry into the state of the pharmaceutical industry in this country is awaited, might it not be a good thing to establish a further Commission to inquire into the state of the food industry? As a complementary gesture, I suggest that a suitably qualified person, prominent in the pharmaceutical industry, be appointed chairman of such a Commission.—

CARBOY

Pharmacists Still Influential

SIR,—It is gratifying to see that we retail pharmacists are capable of winning commercial battles. Surprising evidence has revealed that our influence is still more than significant. How else can one explain the amazing terms now being offered by Pfizer, Ltd.? The company's representative, this week, made the following proposition: On purchases of £25 and over of a tetracycline, an extra discount of 20 per cent. is available—but this attractive discount has to be taken in the form of an extra 10 per cent. discount on the invoice, and 10 per cent. as a credit note for Unicliffe, Ltd. As we are all aware of the extremely expensive administrative costs of such an operation, poor Messrs. Pfizer must surely be bitterly regretting their decision to increase the area of distribution of their products from the narrow "chemist only" field. D. H. MADDOCK,

Cardiff

Dammar

SIR,—Redwood's 1857 Supplement to the British Pharmacopoeia mentions *Dammara Australis*, which yields cowdrie pine resin, used in varnish. A Hitchin artist, Theodore Kern, uses

dammar resin dissolved in turpentine as a picture varnish and, with the addition of egg, as a medium for egg-tempera painting. He does not obtain it from a chemist but from Cornelissen, Great Queen Street, London, W.C.2. The source of the resin is Sumatra or Batavia, and further information is given in "Materials for the Artist" by Max Doerner. The drug jars in my own painting (see *C. & D.*, December 31, 1966, p. 621) are unfortunately only reproductions—they were supplied by Wm. Warner some years ago as a bonus on Veganin orders. In spite of that, I find them beautiful, and they have been the subject of two paintings accepted for exhibition in London. Possibly Messrs. Warner have the originals.

V. E. LEWIS,
Hitchin, Herts

Rural Dispensing

SIR,—Has the Ministry of Health developed cold feet? Some time has elapsed since we saw the proposed plans for the abolition of the 1-mile limit for doctors' dispensing in rural areas and the coming of the new criterion that the interests of the patient should be paramount in the decision. The patient, it was agreed, should have the benefit of a pharmaceutical service and many "embryo" Dispensing Committees have been formed. In the meantime we have noticed the increased and increasing opposition of the doctors to this scheme, coupled with endeavours by the Minister to placate the medical profession. Has the proposed plan been sacrificed to that aim? All we know is that the Ministry is very quiet and that more and more doctors are taking up dispensing. There has been no period of quiet on their part but a continued encroachment. Will this continue so that the Ministry can back out and say doctors' dispensing has gone on too far and too long? There can be no period of quiet for the rural pharmacist in this matter. Is it not time to start asking questions on the progress of the Ministry in this matter?

MERVYN MADGE,
Plymouth

Testing for Shelf Life

PHARMACISTS AND PACKAGERS LEARN OF THE PROBLEMS

THEORETICAL and practical aspects of estimating the shelf-life of products were considered at a joint meeting of the Pharmaceutical Society and the Institute of Packaging at Imperial College of Science and Technology, London, on January 5.

MR. G. A. GORDON (Printing, Packaging and Allied Trades Research Association) described work done on collecting data relating to conditions inside warehouses and transport vehicles. The life-history of the unit container from manufacturer to customer, he said, might be from 2-3 weeks to a number of years, and during that time the unit container itself would meet a variety of conditions: some direct, some when contained in an outer case, and some in the outer case as part of a larger stack.

Effects of External Environment

The external environment — temperature and relative humidity — would exert an effect on the package, and changes in the environment could be divided into shorter-term (less than two hours), with an approximately sinusoidal curve; diurnal variations, also sinusoidal (in collecting data the daily range could be used); random day-to-day variations (covered by the differences between daily values), and seasonal variations, which were again approximately sinusoidal and were calculated from monthly means. The package also experienced step changes during the few minutes of transfer from one environment to another.

The speaker said that little work had been done on conditions inside buildings, but P.A.T.R.A. had done work on rail waggons. He showed slides to demonstrate that, with large daily outside variations, there were smaller corresponding variations in an empty waggon. In a filled waggon the variations were further reduced and inside the stack at the centre of a load the differences were almost entirely wiped out. At floor level, day-to-day temperature changes were reduced to about one-fifth, and diurnal changes to about one-sixth, while relative humidity changes were reduced to about one-twentieth. From that "damping factor" could be calculated the "time constant," which was a measure of the time of passage of the response. From the time constant could be calculated how longer-term changes were transmitted to the unit. The time constants were: on top of the stack in the waggon, of the order of two hours; in the corners at floor level, and on the top of the load inside a fibre-board case, six hours, and in the middle of the stack and at centre floor level, 20-30 hours. Mr. Gordon suggested that corresponding figures for buildings would be 20-30 hours for multi-story and five for single-story buildings, the figures probably being increased if large stores were held inside the building.

Relative humidity changes inside depended more upon inside temperature

fluctuations than upon outside relative humidity changes. Thus short-term (up to ten hours) cyclical changes were unlikely to be transmitted to any great extent in an unheated building unless there were a heating effect from solar radiation through windows. The time constant for relative humidity was longer than for temperature, owing to the transmission of water vapour through the case. The presence of large amounts of hygroscopic materials in the store also acted as a buffer. Mr. Gordon warned that, in simulation of those changes, it was necessary, where the reaction rate was highly dependent upon temperature, to know — for calculations — the distribution of temperatures and not simply to rely on the average temperature.

MR. J. A. CAIRNS (P.A.T.R.A.) outlined possible sources of information about the limits of change in environmental conditions. He showed that at present the information available was insufficient, being largely confined to maximum, minimum and mean data. A change in relative humidity and temperature occurring at the same time might have a greater effect than either parameter change alone would have in the presence of a low value for the other. It was the speaker's opinion that the following data were required: — Average daily maximum, minimum, mean; average daily range; proportion of time for which temperature or relative humidity exceeded a predetermined level; and the frequency of such periods. Slides were shown to demonstrate that, in rail waggons, seasonal variations in temperature outside were followed closely by those inside. However, they were lower inside in the first three months of the year and higher in the second three months — owing to radiation effects on the outside of the van in the second period, the situation being reversed in the second half of the year. On the other hand relative humidity behaved without such relationship, and appeared more dependent upon the material in the stack than upon the ambient humidity. A more sophisticated survey had recently been carried out in shops and warehouses over a period of six months, with the data being collected at two-hourly intervals. It was at present being processed.

Approach Empirical

MR. E. K. CLARKE (Beecham Toiletory Division) described his methods of testing toiletries and cosmetics. The approach, he said, had to be empirical. His aim was a shelf life of two years in general — that is the product should be commercially acceptable for that period. Surveys had shown that a large number of smaller stockists in particular did not rotate stock well, and new packs, "deals," etc., tended to leave older stock behind. The plot of percentage remaining against age was approximately logarithmic. It was found that 5-10 per cent. of purchases were one year old, 2-4 per cent. two

years old, and 1 per cent. four years old (though the last figure was based on a small number of samples). The two-year figure, however, represented, on a million packs sold, 20,000 — "a lot of dissatisfied customers if the pack did not 'stand up.'"

In testing he did not attempt in general to simulate the conditions the package would be exposed to, as those were too variable. It might be necessary with pharmaceuticals to do a great deal of work on moisture pick-up, performance of barriers, etc., as a quite small change could often render the product ineffective. For many cosmetic creams, however, there could be a water content of up to 50 per cent., and a considerable amount of that — up to 20 per cent., on some shampoos — could be lost without affecting the product. Mr. Clarke believed in standardised testing, the alternative to simulation being to use a wide range of conditions and to find results that approximated to those found in practice. His temperature tests were carried out at 1°C. (so as to keep samples as nearly as possible unchanged), 20°, 30°, 40° and 50°, the latter being used for formulation purposes. From that range it was possible to accelerate with confidence. He would never accelerate from tests carried out at only one temperature. Other tests were carried out at 20°/55 per cent. R.H. and 40°/75 per cent. R.H. — drier than a normal test to get more weight loss. Pharmaceuticals would often be tested under more humid conditions to test for product breakdown.

Comparisons and Checks

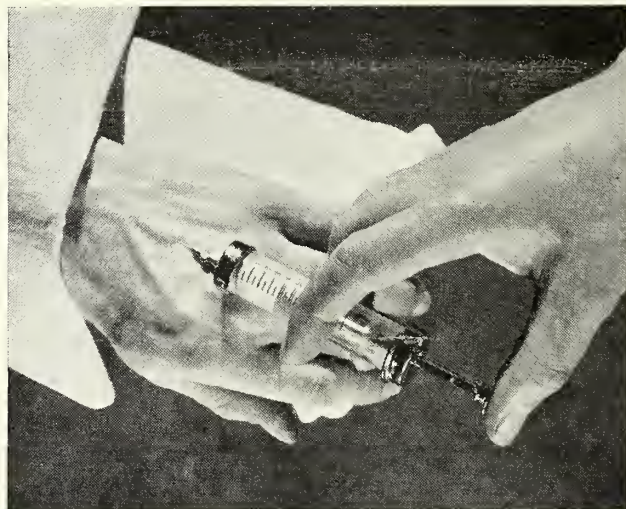
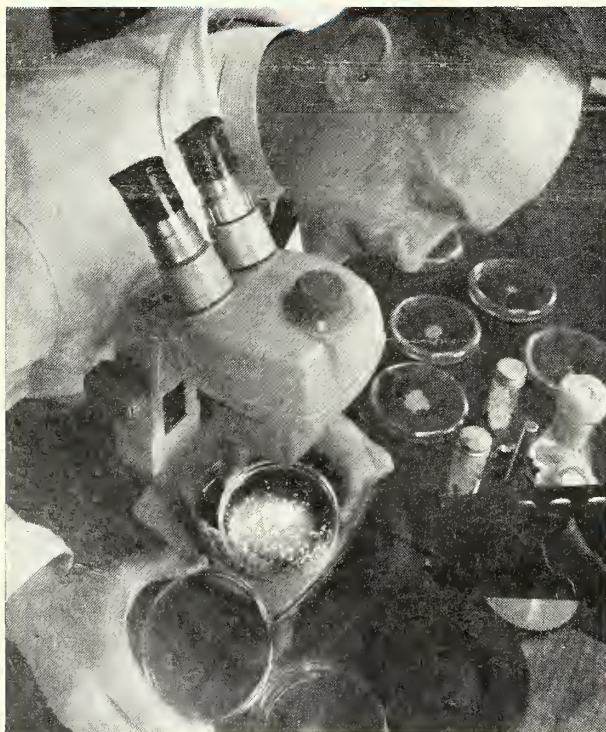
All products were submitted to the same testing schedules, so that the results for various formulations could always be compared. Standardised reporting had been achieved, but some measurements, such as perfume strength and cream texture, had to be subjective. Checks were carried out by sending bulks of packages to market abroad, where they were stored in "typical" warehouses or shops and returned at intervals (usually by air) for comparison with laboratory findings.

Asked about testing for the influence of light, Mr. Clarke said that it was one of the standard conditions used unless there was a completely opaque pack. They had at first used a "cucumber frame" on the roof for some light tests, but had found little consistency in the results. Now a xenon arc cabinet, with light filtered through copper-sulphate solution to remove excess ultra-violet, was used, the product being in standard packs. That method was found to give consistent results, so that one product could be compared with another. Another questioner was told that fluctuating temperature effects were tested by changing the 20°C. level to 40° C. twice a week, but the method was too slow to allow much importance to be attached to the results. Shorter intervals were used for emulsions, etc.

THE FLAME-PROOF AREA
(Crookes Laboratories, Ltd.).
Judged the
outstanding photograph
of the competition

The pharmaceutical industry presents its "image"

DURING 1966 the Association of the British Pharmaceutical Industry organised among its members a competition aimed at getting together a selection of photographs that would present the industry in its best light. There were seven categories, and they attracted a numerous total (if far from uniform) entry. Here are shown three the panel selected for awards.



(At left)
**ANTIBIOTIC
RESEARCH**
(Glaxo
Laboratories,
Ltd.)

(Above) **INJECTION**
[Pharmaceutical
Specialities (May &
Baker, Ltd.)]

Cumulative price changes

AMENDING C & D
QUARTERLY PRICE LIST
FOR DECEMBER 1966

[illegible]

the most versatile digitalis glycoside

LANOXIN[®] brand DIGOXIN

TABLETS • SOLUTION • INJECTION • PÆDIATRIC ELIXIR
BURROUGHS WELLCOME & CO. (*The Wellcome Foundation Ltd.*) LONDON



[illegible]

[illegible]

D	Lidothesin (1341 Willows) existing entry																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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Polysil (1263 Upjohn) (vet.) 12x1oz 34 0ea — 51 0	D soap Windsor & buttermilk — — —	Slenda (1564 JR&S) low calorie drink 20oz 24 3 3 7 2 9
Ponstan (938 PD) Kapsels 125mgm 25 & 250	D toilet paper — — —	Sof'down (1349 LW) tie-pants (4) 32 3 — 1 11
Potaba (521 Glenwood) capsules 240 48 9ea — 65 0	Sankyo (1343 DW) cameras — — — 1190 0	Soframycin (1087 Roussel) T5 nebuliser 15mils 76 0 — 9 6
Envules 1000 184 2ea — 245 6	Super CM — — — 1391 6	Solupen (378 Dista) mega units 0.2x5
tablets 40 54 0ea — 72 0	Super 5X — — — 1590 0	Sorbidel (1531 Delandale) (distributors 1077 Rona)
120 21 4ea — 28 6	Super 5CM — — — 96 4	Solvul (235 Carteret) tablets 21 9 6 0 2 11
1000 148 2ea — 197 6	case — — — 990 0	Spratts (1175 SPL) meat kennel size
Pregnyl (917 Organon) ampoules 100 iu 3	projector Dualux — — —	Stelazine (1153 SKF) †s4B Spansule capsules 10mgm 100 45 4ea — 68 0
Prenomiser (1530 Fisons) 20mils 12 3ea — 18 4	Sarakan (1105 Sarakan) toothpaste 32 0 8 10 4 9	D Ster-zac (626 HH & C) existing entry
Pretext (730 Lanvin) perfume 1/2oz — — 46 0	Scandal (730 Lanvin) perfume 1/2oz — — 46 0	I Ster-zac (626 HH & C) anti-bacterial soap
handbag spray 1/2oz — — 63 0	handbag spray — — — 63 0	squeeze pack 14oz 4 8ea 1 3ea —
refill — — — 55 0	refill — — — 55 0	dispenser pack 16oz 10 0ea 2 9ea —
toilet water 2oz — — 39 6	toilet water 2oz — — 39 6	1 gall 26 8ea 7 4ea —
32 0	Schick (1115 51) electric shavers	bath concentrate
Pretty Poodle (927 OL) dog shampoo 4oz 24 0 6 7 3 6	Cordless 220E 184 8ea 49 6ea 304 2	sachets 50x3mils 14 6ea — —
Procelium (1530 Fisons) ointment — — —	Lady Schick 107E 64 9ea 17 4eass 106 8	12x1oz 11 6ea — —
Progestin (917 Organon) ampoules 10mgm 3, 12 & 25	Super 3-speed 233W 135 4ea 36 3ea 222 11	144x1oz 120 0ea — —
25mgm 3, 12 & 25	hairdryer 312 113 10ea 30 6ea 182 3	500mils 10 6ea — —
Progestoral (917 Organon) tablets 5mgm 25	Score (172 BMCL) hair dressing 38gm 22 1 5 9 3 0	2 litres 36 0ea — —
10mgm 25	80gm 36 2 9 6 4 11	cream 2oz 22 0 5 9 —
25mgm 25	Scram (1116 SP) (distributors 1545 Vestric)	1 lb 9 0ea 2 6ea —
Prosol (1249 Trufood) 16oz 81 0 — 8 6	D Seclophen (518 Glaxo)	powder 30gm 13 9 —
3lb 230 8 — 24 0	D Sedulon (1074 Roche)	8oz 32 3 —
Protovite (1074 Roche)	D Seltol (1125 Seltol) existing entry	skin cleaner
Purix (1530 Fisons)	I Seltol (1125 Seltol) dental salt 16 7 4 6 1/2 2 4	150mils 4 4ea 1 2 1/2ea —
Purr (295 CM & R) 32 0 — 10	D Sevilan (1372 CCL)	1 gall 50 0ea 13 9ea —
Quadrillin (418 Glaxo)	I Sevilan (580 DH & Co.)	soap wrapped 10 3 2 10 —
Quixalud (1176 Squibb) dispersable powder (vet.) 240gm 25 0ea — 37 6	I Silcot (786 Mac Donald) sanitary belts	unwrapped 85 0 23 4 —
1-2 kilo 108 4ea — 162 6	popular 14 8 1 7 1/2 1 9	Sterogyl-15 (1087 Roussel) oral 3 68 0 — 8 6
Radiomulsin (179 BDH) 115mils 38 0 — 4 9	trimline 16 8 1 10 2 0	D Streptol (518 Glaxo) 50% packs
500mils 138 0 — 17 3	de-luxe 16 8 1 10 2 0	D Streptaquine (378 Dista) cartridges
2 litres 39 0ea — 58 6	suedeline 21 0 2 3 1/2 2 6	1-0gm/2 mils 5
Redoxon (1074 Roche) ampoules 100mgm/2mils 50	D Silma (1343 DW) existing entry	Streptotriad (971 P5MB) †s4B granules 60mils 48 0 — 6 0
500mgm/5mils 3	I Silma (1343 DW) projectors standard 8	I Suba-Seal (479 WF) hot water bottles
Regula (980 Photopia) flash unit AG — — — 39 6	120 M — — — 790 0	childrens shapes
Remiderm (1176 Squibb) cream (vet.) 5gm 42 0 — 5 3	240 S — — — 1990 0	bear cub and dog
Reserpalin (238 CL)	case — — — 110 0	tooby 68 0 — 8 6
Ricoh (817 MP5)	projectors Super 8	father bear 71 0 — 8 11
Ricoh (565 Hanimex) projector Auto 8P Dualmatic	120 M — — — 799 6	Suba cosy cot (covered) 111 0 — 12 6
Rimifon (1074 Roche) ampoules 50	240 S — — — 1190 0	Suba luxe cot (covered) 124 0 — 14 11
Rinural (1310 VVW) †DDI	case — — — 110 0	streamline 34 0 — 4 3
lincus 125mils 56 0 15 0 8 3	Silsan (786 Mac Donald) sanitary towels	nursery rhyme 31 4 — 3 11
Robitussin A-C (1071 Robins) †s7DDI	soluble size 1 6 9 4 — 1 0	Suba-Luxe (covered) 210 0 — 24 11
20oz 38 4ea — 57 6	12 17 10 — 1 11	screw type 58 0 — 7 3
Romilar (1074 Roche) tablets 20	I Simpkin's (1141 Simpkin) chocolate centred barley sugar	mini-soother IC35 4 8 — 7
Rondo (817 MP5) projector V58 Super 8 — — — 399 0	butterscotch 15 0 2 6 2 0	rubber closures (9) 22 0 — 2 6
Ronicol (1074 Roche) ampoules 50	lime 15 0 2 6 2 0	teat latex wide neck IC39 6 0 — 9
Rosedale (261 Christy)	orange 15 0 2 6 2 0	Sucron (67 Ashe) 12oz 39 0 — 3 11
Rosedale (451 F & J)	peppermint 15 0 2 6 2 0	D Suleo (671 Jeyes) emulsion 20oz
Roxy (928 Pad)	glucose winter candy 10 0 1 8 1 3	D shampoo 20oz
Roxy (555 Haffenden) bathing caps 52 0 5 2 1/2 6 11	1/2 lb tins 25 0 4 1 1/2 3 0	Supersoft (563 Hampshire) Close-up deodorant aerosol 31 7 10 2 5 0
rubber gloves 28 6 3 2 3 11	barley sugar drops 25 0 4 1 1/2 3 0	Tabac Original (961 EGP) shaving bowl 125gm — — 21 0
super 35 6 3 11 4 11	bitter lemon acid drops 25 0 4 1 1/2 3 0	shaving cream 86gm — — 7 6
Rozalex (1088 Rozalex) No. 1 unperfumed tin 23 3 6 4 1/2 3 3	digestive mint drops 25 0 4 1 1/2 3 0	shaving stick 75gm — — 7 6
lanolin skin cream 23 3 6 4 1/2 3 3	fruit drops 25 0 4 1 1/2 3 0	refill 75gm — — 6 5
Rubrafer Improved (1176 Squibb) (vet.) vial 50 dose 45 0ea — 67 6	tangerine, lemon & grapefruit drops 25 0 4 1 1/2 3 0	Tabano (718 LAB) anti smoking pastilles 54 0 — 6 9
Ruelene (1263 Upjohn) concentrate (vet.) 1pt 21 8ea — 32 6	glucose pastilles blackcurrant & glycerine 16 4 2 8 1/2 2 3	Tabloid (208 BW) quinidine sulphate 0.2gm 100 60 0ea — 90 0
1gall 153 4ea — 230 0	blackcurrant fruit pastille roll 7 10 1 3 1/2 1 0	I Tackle (280 CP) medicated gel 36 4 9 11 5 0
Rumeur (730 Lanvin) perfume 1/2oz — — 46 0	fruit pastille roll 7 10 1 3 1/2 1 0	D Taka-disatase (938 PD) pepsin compound tablets 25
1/2oz — — 63 0	glycerine, lemon & honey 16 4 2 8 1/2 2 3	D Taractan (1074 Roche) ampoules
handbag spray 1/2oz — — 55 0	medicated confection menthol & eucalyptus 10 8 2 11 1 6	T.C.P. (1552 UL) ointment 16 6 4 6 1/2 2 2 1/2
refill — — — 39 6	medicated pastilles antiseptic black-currant 16 4 4 6 2 6	D Tersavid (1074 Roche) tablets
toilet water 2oz — — 32 0	Bronco-pines 16 4 4 6 2 6	Tetrex PMT (117 BLL) T5 injection vial 350mgm 7 0ea — 10 6
Rynabond (1530 Fisons) †s7	cherry lincus 16 4 4 6 2 6	Thean 300 (68 AH) tablets 50 78 0 — 9 9
tablets 30 108 0 29 8 1/2 16 0	Dilly Duckling 15 0 4 1 1/2 2 3	250 30 0ea — 45 0
250 65 0ea 17 10 1/2ea 115 4	Gee's lincus B.P.C. †DDI 13 8 — 1 8	Thean 400 (68 AH) ampoules 4 mils 5 78 0 — 9 9
4oz 69 0 19 0 10 3	glycerine of thymol 16 4 4 6 2 6	D Thephorin (1074 Roche) ointment 1 lb
Sanette (927 OL) fragrant air 11 6 — 1 4	lincus codeine B.P.C. † 21 0 5 9 3 0	Tidman's (1235 Tidman) table sea salt 12oz 26 6 — 2 11
Sanilav (671 Jeyes) medium 15 0 — 1 8	mentholated bronchial with friars balsam 16 4 4 6 2 6	5 lb 117 6 — 12 11
giant 24 8 — 2 9	menthol & eucalyptol B.P.C. 15 0 — 2 3	
Sanitas (1102 Sanitas) powder (sprinkler) 18 0 — 2 0	T.C.L. 16 4 4 6 2 6	
28lb 23 6ea — 31 4	uncrystallised antiseptic throat 16 4 4 6 2 6	
56lb 38 0ea — 50 3	uncrystallised Gee's lincus B.P.C. †DDI 13 8 — 1 8	
1cwt — — —	sugarless pastilles assorted fruit 17 6 2 10 1/2 2 3	
floor polish — — —	Bronco-pine catarrh 19 0 5 3 2 9	
moth tablets — — —	blackcurrant 18 9 3 1 2 6	

Tonic Sweet (1559 TS) existing entry				2%	5 mils	50	42	6ea	—	—	long oval	thin $\frac{1}{16}$ in $3\frac{1}{2}$ in \times 2 in	44	8	—	6	
Tonic Sweet (1559 TS)				vials	10 mils	20	43	6ea	—	—	thin $\frac{1}{16}$ in $3\frac{1}{2}$ in \times 2 in	44	8	—	6		
(distributors 1545 Vestric)				0.5% 20 mils	6	10	10ea	—	—	—	thick $\frac{1}{16}$ in	57	4	—	8		
barley fruits, barley				1% 20 mils	6	11	6ea	—	—	—	extra large oval	thin $\frac{1}{16}$ in $2\frac{1}{2}$ in \times $1\frac{1}{2}$ in	35	0	—	4	
sugar, butter pieces,				2% 20 mils	5	12	6ea	—	—	—	thin $\frac{1}{16}$ in $2\frac{1}{2}$ in \times $1\frac{1}{2}$ in	35	0	—	4		
horehound candy,				50 mils	4	8ea	—	—	—	—	thick $\frac{1}{16}$ in	44	8	—	6		
malted milk, milk				with adrenaline	1-50,000 \pm 4B	cartridge green	2% 2.2 mils	60	19	0ea	—	—	—	—	—	—	
and butter, milk				1-80,000 \pm 4B	cartridge red	2% 2.2 mils	60	19	0ea	—	—	—	—	—	—	—	
toffees				10 8	1 9	1 3	—	—	—	—	—	—	—	—	—	—	
barley fruit lollies				14 0	2 3 $\frac{1}{2}$	2	—	—	—	—	—	—	—	—	—	—	
(10 doz)				(10 doz)	(10 doz)	—	—	—	—	—	—	—	—	—	—	—	
blackcurrant sticks				16 9	2 9 $\frac{1}{2}$	—	—	—	—	—	—	—	—	—	—	—	
(6 doz)				(6 doz)	(6 doz)	—	—	—	—	—	—	—	—	—	—	—	
Top C (727 Lane)				vitamin health drink	12oz	37	6	6	2	4	6	—	—	—	—	—	
Trilocal (394 DF) TS				cream	15gm	45	0	—	—	—	—	—	—	—	—	—	
Trombovar (93 BJ) existing entry				ampoules 2cc	10	32	5ea	8	11ea	—	—	—	—	—	—	—	
Trombovar (93 BJ)				multivial 25 mils	1	31	2ea	8	7ea	—	—	—	—	—	—	—	
Tussobron (1335 Wigglesworth)†				12 374	0ea	102	10ea	—	—	—	—	—	—	—	—	—	
syrup				4oz	30	0	—	—	5	0	—	—	—	—	—	—	
Tylagel (378 Dista)				U.F.I. (1413 P&S)	aerosols	10gm	12	0ea	3	4ea	21	4	—	—	—	—	
Un Air Embaume (Rigaud) (47 Anestan)				perfume standard	1oz	9	9ea	2	8ea	19	9	—	—	—	—	—	
de-luxe				1oz	25	0ea	6	10ea	50	6	—	—	—	—	—	—	
super de-luxe				1oz	36	0ea	9	11ea	73	0	—	—	—	—	—	—	
spray				1oz	50	0ea	13	9ea	101	3	—	—	—	—	—	—	
refill				1oz	47	6ea	13	1ea	96	3	—	—	—	—	—	—	
toilet water				1oz	66	0ea	18	2ea	133	9	—	—	—	—	—	—	
standard				2oz	19	0ea	5	3ea	38	6	—	—	—	—	—	—	
spray				4oz	30	0ea	8	3ea	60	9	—	—	—	—	—	—	
refill				8oz	54	0ea	14	10ea	109	4	—	—	—	—	—	—	
Uralka (745 Legat)				32oz	260	0ea	71	6ea	526	6	—	—	—	—	—	—	
Varico (1127 Seton)				spray	3oz	39	0ea	10	9ea	79	0	—	—	—	—	—	—
(distributors 93 BJ)				refill	3oz	23	6ea	6	5ea	47	6	—	—	—	—	—	
leg bandage				500mils	5	4ea	—	—	—	—	—	—	—	—	—	—	
3in \times 3yd				8	6ea	—	—	12	9	—	—	—	—	—	—	—	
Vetzyme (978 PYP)				cream shampoo 2oz	15	0	4	2	2	2	—	—	—	—	—	—	
Vionate (1176 Squibb)				4oz	26	0	7	2	3	9	—	—	—	—	—	—	
Vionate-L (1176 Squibb)				13oz	56	0	15	5	8	3	—	—	—	—	—	—	
V.I.P. (430 Eucryl)				$\frac{1}{2}$ gall	26	0ea	7	2ea	45	6	—	—	—	—	—	—	
baby pants				1 gall	44	0ea	12	1ea	77	0	—	—	—	—	—	—	
baby cream				6 \times $\frac{1}{2}$ lb	22	0	—	—	30	0	—	—	—	—	—	—	
Vitatone (745 Legat) existing entry				2 lb	20	0ea	—	—	30	0	—	—	—	—	—	—	
Vitatone (745 Legat)†				2 lb	20	0ea	—	—	30	0	—	—	—	—	—	—	
Voss (1169 GS&S)				10 lb	80	0ea	—	—	120	0	—	—	—	—	—	—	
bath oil				50 lb	333	4ea	—	—	500	0	—	—	—	—	—	—	
bottle				5-bath	32	0	8	9 $\frac{1}{2}$	4	9	—	—	—	—	—	—	
sachet				22-bath	86	0	23	8	12	9	—	—	—	—	—	—	
White-Fire (544 Grossmith)				45-bath	168	0	46	2 $\frac{1}{2}$	25	0	—	—	—	—	—	—	
skin perfume				616	56	0	15	4 $\frac{1}{2}$	8	6	—	—	—	—	—	—	
Woltz (128 Biometica)				nail hardener	99	10	27	5 $\frac{1}{2}$	15	0	—	—	—	—	—	—	
Wonder Set (1037 Reckitt)				40	6	9	10	5	7	—	—	—	—	—	—	—	
Woof (295 CM & R)				35	0	—	—	—	—	—	—	—	—	—	—	—	
(4 doz.)				—	—	—	—	—	—	—	—	—	—	—	—	—	
Xylocaine (68 AH) existing entry				ampoules 0.5%	20	20	0ea	—	—	—	—	—	—	—	—	—	
Xylocaine (68 AH)				10 mils	50	17	0ea	—	—	—	—	—	—	—	—	—	
plain				20 mils	50	38	0ea	—	—	—	—	—	—	—	—	—	
ampoules 0.5%				10 mils	20	22	6ea	—	—	—	—	—	—	—	—	—	
1%				20 mils	50	18	6ea	—	—	—	—	—	—	—	—	—	
1.5%				25 mils	4	2ea	—	—	—	—	—	—	—	—	—	—	
2%				2 mils	100	42	6ea	—	—	—	—	—	—	—	—	—	
cartridge blue 2%				5 mils	50	42	6ea	—	—	—	—	—	—	—	—	—	
2.2 mils				60	19	0ea	—	—	—	—	—	—	—	—	—	—	
1.8 mils				50	16	3ea	—	—	—	—	—	—	—	—	—	—	
vials 0.5%				20 mils	6	10	10ea	—	—	—	—	—	—	—	—	—	
1%				50 mils	4	2ea	—	—	—	—	—	—	—	—	—	—	
2%				20 mils	6	11	6ea	—	—	—	—	—	—	—	—	—	
with adrenaline				50 mils	4	4ea	—	—	—	—	—	—	—	—	—	—	
1-200,000 \pm 4B				20 mils	6	12	6ea	—	—	—	—	—	—	—	—	—	
ampoules				50 mils	4	8ea	—	—	—	—	—	—	—	—	—	—	
0.5%				5 mils	50	34	0ea	—	—	—	—	—	—	—	—	—	
1%				5 mils	50	38	0ea	—	—	—	—	—	—	—	—	—	
2%				10 mils	20	22	6ea	—	—	—	—	—	—	—	—	—	
felt pads, soft, semi-compressed or compressed				thin $\frac{1}{16}$ in $2\frac{1}{2}$ in \times $2\frac{1}{2}$ in	40	10	—	—	57	2	—	—	—	—	—	—	
O.S. oval				thick $\frac{1}{16}$ in	50	8	—	—	71	0	—	—	—	—	—	—	
thin $\frac{1}{16}$ in $2\frac{1}{2}$ in \times $2\frac{1}{2}$ in				gross	—	—	—	—	—	—	—	—	—	—	—	—	
thick $\frac{1}{16}$ in				gross	—	—	—	—	—	—	—	—	—	—	—	—	

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THIS WEEK'S CHANGES

Prices are given in the sequence Trade Price per Doz.; Purchase Tax per Doz.; Retail Price. Bold upright figures (2 9) in the retail price column indicate that the price is subject to resale price maintenance; italic figures (2 9) that it is recommended by the manufacturers; and light upright figures (2 9) that it is "notional" as a guide to the retailer in determining his own retail price.

Aldactone-A (1121 Searle) tablets 25 mgm 40 26 6ea — 39 9	R	Efcortelan (518 Glaxo) TS soluble, 1 vial with 2 mls water for injection S 0ea — 6 8	I	ampoules 1mil I 10 0ea — 13 4
Allinson (40 Allinson) starch-reduced rolls white 15 not 10 brown 15 not 10	D	Equizole V (837 MSD) Equizole V (837 MSD) VPO powder (vet.) 30gm 65 3 — 7 3	I	L'Aimant (301 Coty) shampoo perfumed 920-20 64 6 17 3 9 6
Angel Face (256 CPL) Brush Alive 53 9 14 10 —	I	Fiona (164 Brandt) (distributors 261 Christy)	I	Lyovac Cosmegen (837 MSD) TS 0.5mgm 11 10ea — 17 9
Aqua D'Oro (102 CB) foam bath sachet 20 0 5 6 I 0	I	Fucidin H (747 Leo) TS ointment 10gm 6 6ea — 8 8 25gm 14 0ea — 18 8	R	Macleans (105 BTD) toothbrushes 16 I — I 11
bottle 8oz 72 0 19 10 10 6	I	Genticin (187 BS) TS cream 15gm 8 6ea — ointment 15gm 8 6ea —	R	Naclex (518 Glaxo) ts4B tablets 50mgm 100 16 9ea — 22 4 500 76 6ea — 102 0
Arcofac (61 APC)	I		D	Nicotinamide (1074 Roche) tablets
Armonoestrol (61 APC) all packs	I		D	Nicotinic acid (1074 Roche) tablets
Betnelan (518 Glaxo) TS	I		D	Nidar (61 APC)
tablets 0.5mgm 100 17 0ea — 22 8	I		D	Nitoman (1074 Roche)
Breck (1509 C of GB)	I		D	Noctenar (61 APC)
creme rinse sachet 6 0 I 8 10	I		D	Panar (61 APC)
Miss Breck hair-spray	I		D	Pantothenic acid (1074 Roche) tablets
370gm 70 0 19 4 9 11	I		D	Rayglo (333 Cupal)
Clearway (256 CPL)	I		I	worm elixir 16 8 — 2 6
men's hairdressing	I		D	Slim-Easy (831 Meggeson)
jar 48 7 13 5 3 6	I		I	Slim-Easy (40 Allinson)
(2doz) (2doz) 79 11 22 0 5 10	I		R	Stabillin V-K (147 Boots) TS
(2doz) (2doz) 40 0 11 0 S 10	I		R	sulpha tablets 125mgm 100 23 4ea — 35 0
Cortrophin "ZN" (917 Organon) ts4B	I		D	Thyrophem (61 APC)
injection 40iu/ml	I		I	Topglass (1400 PBI)
5 mls 29 0ea — 43 6	I		I	liquid fertiliser 8oz 24 0 — 3 0
Cossack (563 Hampshire)	I		I	smoke 32 0 — 4 0
men's hairdressing aerosol	I		I	soil fungicide 30 0 — 3 9
18oz 66 2 19 7 10 6	I		C	Tova (179 BDH) ts4B
Cuemid (837 MSD)	I		I	tablets 3 x 21 38 3ea — 57 4½
216gm 61 4ea — 92 0	I		I	Tribactric (1413 P & S) TS
Disbactric (1413 P & S) TS	I		I	51 0 14 0 7 7
54 0 14 10 8 0	I		I	Vaseline (256 CPL)
	I		I	petroleum jelly
	I		I	nursery pack 8oz 41 4 11 6 —

A = Price Advanced
R = Price reduced
● = New entry
D = Delete
C = Correction
I = Insert

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A Few Days with the Lid Off

A FORETASTE of what may happen, when or if resale price maintenance goes on chemists' goods, has been given in the cigarette trade. Supermarkets jumped the gun of a rumoured abandonment by the Imperial Tobacco Co., Ltd., of R.P.M. on cigarettes. Prices were slashed to levels below those at which some tobacconists could buy. Sales soared in the price-cutting stores, slumped everywhere else. There was glee for compulsive smokers and for Tesco Stores, Fine Fare, Price-rite and the other supermarkets, some discomfort for the other shoppers and dismay among the independent tobacconists. Here was no switch from sellers making excessive profits to others content with more reasonable rates. The margins of the recognised retailers were — at the levels that are understood to operate — modest enough. What the supermarkets were after was not profit on the cigarettes but profit on the other goods in the store. Mr. Jack Cohen (of Tesco) made no bones about it. He said "We are treating tobacco as we do sugar, which has always been a loss leader. It's something to bring people into the stores". And for what? To buy other goods at "cut" profits or at profits above the odds? Disillusionment over the supposedly low prices of supermarkets was certainly evident among housewives in America during a recent election. Alistair Cooke, reporting at the time in the *Guardian*, wrote "Nightly round-ups of national news on the two biggest networks are a-bristle with regiments of women traipsing in front of mountains of fruit, and breads, and tinned goods and bearing such signs as 'We can't afford to feed our kids,'" and he went on to explain that "The theory . . . is that if the supermarket owners would spend less money on advertising, on printing stamps, on 'grand openings' and gambling games, they would be able to pass their savings to the housewife and the things she puts in her shopping bag."

Whatever Mr. Cohen says, cigarettes are by no means sugar. There have never been retailers selling only sugar, as there were traders selling only tobacco, to be put out of business. There are white sugar and brown granulated and lump, but no multiplicity of brands representing as many nuances of public preference. As a leader-writer in the *Yorkshire Post* succinctly argued on January 16, "If the supermarkets really tried to take over the bulk of the tobacco trade they would encounter fearful problems. They would find themselves having to hold a huge and costly stock of, perhaps, 200 lines . . . It would involve storage space, sales space, extra assistants, extra capital — and all to pull in customers

who would, for the most part, be buying nothing but tobacco."

The same considerations will apply with equal force if resale price maintenance goes on cosmetics and toiletries. And as for medicines, unless safeguards were provided for them in the legislation, the supermarkets would be as eager, if the goods were barred from resale price maintenance, to treat them as "ordinary merchandise" as they proved to be with cigarettes (which, it may be pointed out, the Government has regarded as involving a sufficient threat to health to justify a ban on all television advertising of them).

The fact is that any system that equates "public interest" with cheapness alone creates a travesty of that ideal. Cheapness is not all, and R.P.M. is not all high prices, as the long period of "1s. 3d. and 3s." in proprietary-medicine history can be quoted to demonstrate. Some counter-propaganda in favour of resale price maintenance seems called for to set against that myth of a "public interest" lying in jungle conditions of retailing. Collusion to exploit is an evil that any Government must aim to eradicate, but at fair profits a manufacturer's right independently to enforce a retail price for his own product is no barrier to competition, and has the social benefit of providing consumers with a standard of comparison of values. Without some such yardstick they are soon at the mercy of exploiters.

Reasons, Please!

ANNOUNCEMENTS by the Poison Board concerning proposals to amend the poisons legislation are helpful and welcomed by manufacturers, wholesalers and authorised sellers of poisons. They allow time and opportunity for representations to be made by those who wish to disagree with the proposals and also provide the necessary warnings to enable manufacturers to reorient production and printing schedules accordingly.

However, the present announcements (see p.49) do not include any explanations of the Board's recommendations. For some of the announced decisions it is therefore only possible to guess at the reasons, and guessing is not appropriate when fundamental changes in policy are involved.

The recommendation to exempt from the poisons legislation all vascular plants and their seeds appears to free horticulturalists and sellers of house plants, cacti and seeds from proceedings under the Pharmacy and Poisons Act, 1933. At the same time it removes controls on nux vomica, strophanthus and other seeds that have a relatively high alkaloidal content.

The proposed amendments in respect of feeding-stuffs, which are to be exempt only when containing hexoestrol or stilboestrol, appear to bring the Poisons Rules, etc., into line with the approval machinery introduced by the Ministry of Agriculture and Fisheries.

Problems arising from the interpretation of "for external application" in respect of a preparation of oxy-cinchonic acid are to be solved by giving the compound a First Schedule exemption.

The antihistamines appear to have been almost continuously on the Poisons Board's agenda since the compounds of that group were first issued, and the decisions in respect of them have varied from time to time.

The latest proposal is that all antihistamine substances and their salt and molecular compounds shall

be included in Part B of the Fourth Schedule to the Poisons Rules, and the labelling requirements in paragraph 9 of the Seventh Schedule shall be deleted. If the proposals are carried out they will have the effect of preventing the over-the-counter sales of antihistamines in the form of travel-sickness preparations, otherwise than against prescriptions. In view of the extensive use of antihistamines in travel-sickness preparations, and the problems for retailers that the proposals are bound to create, the Poisons Board should, we feel, make generally known their reasons for their change of attitude.

The antihistamines are generally acknowledged to be relatively free from serious toxic effects. We are aware that in some circumstances an antihistamine can pro-

duce side effects of less serious kind (if of unexpected severity), but that attribute is well known and does not appear to have caused general difficulties.

It may be that the Board has special information such as statistics concerning the effects of antihistamines on car drivers. If so, or if certain other narrow aspects have been responsible for the recommendations, then again the information should be made known, thus enabling pharmacists to consider whether they should, as a professional duty, take action even before the proposals are put into effect. We are not, it should be made clear, criticising the Board's recommendation *per se*, but at this stage merely the non-disclosure of information on which the proposals are based.

"OPEN SHOP"

By E. C. TENNER

GENERALLY I have little time for market-research organisations. I usually have a feeling that, if I co-operate with them, the results of my co-operation are more likely to be used to the detriment than to the benefit of general practice pharmacy. There is, however, one company—A. C. Nielsen Co., Ltd.—which I have always admired and whose reports have always greatly interested me. A friend of mine is a member of the company's panel, but though some years ago I approached the Nielsen representative with a view to being put on the panel, the company unfortunately have not been able to include my business in their investigations. My friend has, however, often passed on to me their reports, which make interesting reading. I was therefore attracted by the recently published excerpts of a report dealing with the year ended August 1966, and, in particular, with the conclusions drawn. After dealing with the increase in prescription income by pharmacists, the Nielsen report points out how disastrous any curtailment of that revenue could prove, and suggests that now is the time for pharmacists to lay plans for building up counter sales. I would not argue with that conclusion. Indeed it is quite obvious.

But How?

But I should have thought that it would have been much more useful for Nielsen to have added a suggestion as to how we should set about doing so. Most particularly, how we can manufacture the time in which to make and put into operation the suggested plans? It is all very well to dwell upon the consequences of a contraction in prescription income, but until that contraction actually takes place the prescriptions have to be dispensed, and since our contract requires that they be dispensed by or under the supervision of a pharmacist, it necessarily follows that the increased numbers of scripts require that the pharmacist shall spend more of his time in his dispensary and in consequence have less time to devote to counter matters. It would seem, therefore, that unless we are prepared to break our contract terms, and indeed to ignore the whole purpose of our training (which is surely to endeavour to the best of our ability to ensure that every prescription presented in our pharmacies is correctly dispensed), we have little alternative but to leave our counters to get along as best they can. For no man or woman, even in this age of miracles, can be in two places at the one time. One can only hope that, at the appropriate time, those responsible for deciding the future of resale price maintenance for medicines will appreciate that fact, and will realise that a worried pharmacist trying to conduct a price war is probably not the best person to be dispensing their prescription, and that if we are to give of our best professionally it is not unreasonable that we should have a certain amount of protection in the more commercial side of our

work. In an address to the Manchester and Salford Branch of the Pharmaceutical Society recently, Sir Arnold France touched, I noticed, on the possibilities of doctors combining a hospital appointment with their general-practice work, and posed the question whether that could also be possible for pharmacists. During the 1939-45 war I spent several years running the dispensary of a hospital attached to the Senior Service and, despite the fact that I had had no previous hospital experience, I found no difficulty in coping with the work involved. Indeed I am sure that, if it were possible to find the time, many general-practice pharmacists would gain great enjoyment from a regular session in a hospital pharmacy department and would also increase their pharmaceutical knowledge. Conversely I am equally certain that it would be just as beneficial for the majority of hospital pharmacists if they could occasionally spend some time in the possibly rather tougher environment of general retail practice. I wonder if it would be possible to arrange some sort of exchange system?

Guidance Required

The report of the December 1966 meeting of Council of the Pharmaceutical Society mentioned the problem presented to many of us in the collection of prescriptions by children. At our branch pharmacy that is a real problem, and one often has cause to ponder where one should draw the line. I have no personal knowledge of any regulations on the subject, and have certainly never heard that it has led to a tragedy. Nevertheless I sometimes feel worried and would appreciate some official guidance.

Finally, for the benefit of those of my colleagues who would betray us in the "N.P." controversy, the prize to date, dispensed this evening, was "R/ Triangular Bandages mitte 2 N.P." (hand written). Does that suggest that the doctor concerned has any real reason for requesting "N.P." on many of his other prescriptions?

Onward from Galen

SIDELINES OF CURRENT COMMENT

★ THEY WERE BUT NAMES ★

THE dead have their mourners but let us shed a passing tear for great men who have been buried alive—casualties of take-over or, as one might put it, the sub-Merged. There's poor old Roberts now. What happened to him? Boake is O.K.—better off than ever, perhaps, except that he's lost his "A" and that his new friends cling one on each arm to restrain him from any tendency to wander off in search of his old partner. And Thomas Morson. For him Merck Sharp and Dohme were one too many. A fourth name on that trio might have given the company the image of a firm of solicitors. Come to think of it, that may be why Lescher and Webb were dropped in what was almost the

trail-blazing operation in the technique—borrowed from football—of relegation to the reserves. Lescher, mark you, was once a chairman of the British Pharmaceutical Conference! Alas that only Evans lives on, Sonless now but, with Duncan and Flockhart, putting on a brave Celtic front, if only in name, in Sassenach territory. Perhaps they are luckier who lost their way in the basements of skyscrapers. Like J. C. Eno, a pharmacist who gave up pharmacy to make more money out of manufacturing his Fruit Salt, but whose company lost its identity when it was taken over. Some day, when a secretary is on holiday, a director who has to search out for himself a file among the archives may bump into Eno's ghost and say "J.C., my dear chap, you're just the fellow we want to get a new subsidiary off the ground" and back the old name may come into immortality as, shall we say, Rib-Eno Fizzy Fruits, Ltd. Some such kindly resurrection, one imagines, befell

Menley and James, though it was a visiting American who rediscovered them—an Anglophile, presumably. Some still famous names seem safe enough, but who knows? It wouldn't seem profitable now to hive off Davis from Parke (though once the title was Duffield, Parke & Co.) or Baker from May (with or without the Pharmaceutical Specialities), but remember! Burroughs once lost a comma and became a mere Christian name. Is not that almost a fate worse than death? It is not intended to infer that the drug trade will come before the Monopolies Commission for enforcing a copyright in this anti-hero—sorry, non-hero—movement. Others are just as bad or worse. Take the brewers. Who ever hears now of Gretton or Paulin or Barclay? At best they linger on as an undefined flavour in the Keg or the label on a minor brand. Ah, well. There are names to conjure with and names that must disappear under the financial wizard's sleight of hand. That's all there is to it.

"Dream made True"—at up to £5,000 *Trade contests and the prospect of more in 1967*

PETER H. MEYER

THE sudden rise in popularity of the "trade contest" promoted by advertisers has been noticed, if not very obviously welcomed, by British pharmacists. Whatever they think of having to keep all those entry forms in stock, one thing seems certain — there will be a lot more of them in 1967.

For British firms and their advertising agencies appear to be following an American trend — and the American consumer is now in the grip of the biggest trade contest bonanza ever known in the land of high-powered sales promotion. During 1966 over £35m. was offered in prizes to about 20 million contest fans, with sponsors willingly spending the estimated half-billion dollars needed for advertising, judging and other incidentals!

In Britain as yet the trade contest has been supported principally by soup and baked bean manufacturers but last year in the United States about 5,000 contests were launched via newspapers, radio and television to an eager public. They ranged from simple crosswords to complicated encyclopaedic questionnaires. The really big-time prizes are won each year in about 275 "major-league" contests which attract entries by the million — and few leading pharmaceutical firms fail to sponsor at least one!

"Big-name" Sponsors

A typical monthly selection of U.S. sponsors would include names like Johnson & Johnson, Chesebrough-Pond's, and most shampoo and tooth-paste "big-names." But the sponsors were by no means restricted to manufacturing companies, for among them were the Baltimore Life Insurance Company and the New Jersey Bank! The Bank contest, incidentally, offered a first prize of a £1,000 swimming pool for adding a last line to this jingle:

New Jersey Bank saves you money,
With auto loans that are a honey.
Simply come in, write or call,
.....

The Bank helpfully add that the last line should rhyme with "call"! This is a typical, not an isolated, example of how the trade contest has now spread through all levels of American commercial life. For effect, try substituting Barclay's or Lloyd's in the first line — it *may* happen here one day when the credit squeeze is over!

Until recently American prize lists showed much greater variety than their English counterparts — although a recent Cadbury prize of a herd of dairy cows shows that we in this country are catching up fast! For the Americans have discovered that money prizes, unless gigantic, do not pull in the heaviest postbags. Several years ago, Old Gold

cigarettes needed a prize list totalling over a quarter of a million dollars in cash to make the necessary impact — and drew nearly 1½ million entries.

The last Johnson & Johnson contest, which netted over a million entries, required contestants to describe their wildest dream — in, of course, twenty-five words or less. The sponsors guaranteed to make the dream come true — up to a value of £5,000. A feature of the contest that is typical of most American promotions was in the fantastic array of minor prizes — totalling about 4,000 and ranging from colour television sets down to flash-gun cameras.

Although both Warner-Lambert and Chesebrough-Pond's have consistently topped the million mark in entries, they are outstripped in another field. Mobiloil recently announced a "five-million plus" response to their latest sweepstake contest.

The actual contest brainwork is the same the world over: slogans, last lines to limericks, and the inevitable "order of merit" predominating. There is a similar uniformity in the winners. As in Britain, women win most of the major awards in America, with housewives accounting for 75 per cent. of all entrants. But in one respect the British entrant has the edge. All winnings in the U.S.A. are taxable, including the retail value of merchandise prizes.

The main difference between trade contests in the two countries, however, would seem to be an attitude of mind. In America the contest promotion is an essential part of any firm's advertising promotion, from the giant Du Pont group down to the smallest manufacturer. In this country, many manufacturers seem a little embarrassed at the thought of using the competition type of promotion; when it is used, a few sponsors seem to forget the retailer is involved!

During 1967 over £40m. will be offered in American trade contests. American druggists will be backed by an estimated £12½m. worth of publicity from pharmaceutical houses sponsoring their own contests. Procter & Gamble alone are reported to have increased their prize appropriation for 1967 to over \$2 million. In Britain, several newcomers appeared on the scene in 1966 and at least two more in the shampoo and beauty-aids field are reportedly entering the arena for the first time this year.

So one thing seems certain. More room will be needed on counters for entry forms during 1967!

And if anyone is wondering what the promoters will think up next in the way of prizes — a trip to the moon has already been offered! An El Paso, Texas, group of drug stores recently offered £400 or the space trip (whenever possible) as first prize! The winner, a housewife, took the cash. "I wouldn't know what to wear on the moon" she said.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN

"ABRIDGED MINUTES" PROPOSAL WITHDRAWN

Branches urged to appoint Press officers

AN allegation that there was a lack of adequate communication between the Council and members of the Pharmaceutical Society was made by Mr. J. A. Myers at the monthly meeting of the Council in London on January 11.

Mr. Myers proposed that an abridged version of the Council's minutes should be sent to branch secretaries. "A number of young pharmacists are anxious to support the Council in pressing forward with matters relating to pharmacy," he said, "but they tell me they cannot give their hearts to this because they do not understand the background arguments that led to decisions taken by the Council. They tend to rebel against things that come to them as accomplished facts." Mr. Myers considered that the published minutes in their present form did not serve the purpose for which they were intended. The motion was formally seconded by Mr. J. P. Kerr.

In the ensuing discussion Mr. C. C. B. STEVENS strongly opposed the idea of providing abridged minutes, describing it as "a hare that should be killed right away." Mr. Stevens alleged that Mr. Myers had put forward his proposition after attending a single branch meeting.

Council Members' Responsibilities

Even if the abridged Council minutes were sent to secretaries, suggested Mr. Stevens, no more information could be given than was already being given. Anyone who wished to know more could attend branch meetings. All branches were visited regularly by members of Council, who were fully aware of their responsibilities to the membership and who would answer any questions provided that the matters raised were not confidential. He would not wish to see an expensive and time-wasting effort made when it would not bring about the results desired.

MR. E. A. BROCKLEHURST said that the Council had considered the matter on many occasions and on each had decided that the proposal would not be worth while. Even if abridged minutes were sent to members, they would not realise the arguments that had led up to decisions taken, and would not know the background. He thought that other means could be found, through the Society's journal or direct, of informing members.

PROFESSOR BECKETT agreed that abridged minutes would be ineffective as a means of communication, but sympathised with the view that background information was not always given to the membership. Possibly the Society's journal could be used more effectively as a means of indicating the situations that had led to Council decisions.

MR. KERR said that he had seconded the motion not because he was completely in sympathy with it but because he felt that it should be discussed. Mr. Myers' proposal was not a solution to the problem. Members wished to be sympathetic to Council policy, but often did not understand the background to Council decisions. Already Council had decided to seek material to be sent to branches in newsletters, and that might meet the difficulty. Undoubtedly there was a problem.

MISS M. A. BURR asked whether it was not a fact that any member who required additional information could approach the registrar and could also obtain advice from him. MR. J. C. BLOOMFIELD (president) agreed that that was so—subject to the information not being confidential and not concerning matters still under discussion.

MR. MYERS, summing up the discussion, said that he had heard the complaint over a number of years. Mr. Brocklehurst had confirmed that the matter had been raised several times at Council meetings, and that it had not been found

easy to produce an answer. Professor Beckett had drawn attention to the lack of background knowledge—the very point made in the motion. Mr. Kerr had also agreed that there was a problem. Miss Burr had said that members could obtain information from the registrar, but the president had pointed out that that did not apply in respect of matters under discussion. In those circumstances members had to wait until they were faced with a *fait accompli*. He was glad that he had raised the matter. A method must be found of providing background information to members if the Council were to carry the membership with it. He would be pleased to withdraw the motion so that general consideration could be given to the problem.

The motion was withdrawn.

The report of The Organisation Committee presented by its chairman (MR. A. ALDINGTON) contained a recommendation that the Society's Press officer should write to branch secretaries suggesting the appointment in each branch of a Press officer and that a national index of branch Press officers should be compiled. It was recommended that the Society's Press officer should also advise and assist such branch officers in their activities, especially in their dealings with Press and television, he should also issue to branch Press officers suitable publicity material.

It was resolved that the quarterly meetings of the agricultural and veterinary practice subcommittee should continue on the basis of two provincial meetings held jointly with group meetings in the winter, and two meetings held in London.

Pharmacies in Health Centres

The Practice Committee (chairman Mr. J. P. Kerr) had continued its consideration of pharmaceutical aspects of the problem of health centres. The Committee's view was that no pharmacy should be included in a health centre where the surrounding district was adequately served by existing pharmacies. Local Pharmaceutical Committees should be fully informed at the earliest possible stage by local authorities of new health centre planning, and membership of any such planning committee should include a pharmacist so as to ensure fullest possible integration of existing or new pharmacies with the work of the health centre. It was recommended by the Committee that a joint approach on the matter should be made to the Ministry of Health by the Society, the National Pharmaceutical Union and the Central N.H.S. (Chemist Contractors) Committee.

The Practice Committee had also discussed considerable past failures to consult in the planning of pharmaceutical departments of new hospitals, and recommended drawing the Minister's attention to the recommendation in the Grosset report that pharmacists' professional experience should be utilised in the planning of a new pharmacy department or the rebuilding of an existing one. Pharmaceutical advice should be sought from the earliest possible stage, and an experienced hospital pharmacist should be appointed as a member of the project team after consultation with the Regional Pharmaceutical Advisory Committee.

The general practice subcommittee's attention had been drawn to the growing use in "ethical" products of tablet-coding symbols. The subcommittee considered that proliferation of codes, when combined with implementation of the proposed pharmacological coding for white tablets, was dangerous and undesirable. However, it was resolved, before any action was taken, to await the final document on the pharmacological coding of tablets.

The recommendations were adopted.

The Law Committee reported that, during November 1966, the premises of 1,076 authorised sellers and seventy-one traders had been visited. Thirteen cases of alleged infringements under the Pharmacy and Poisons Act, 1933, had been considered. Proceedings were recommended to be instituted against one authorised seller and one trader, and warning letters sent to eight authorised sellers and three traders. The recommendations were adopted.

MR. W. M. DARLING (chairman), presented the minutes of the Ethical Committee. Since the Committee's previous meeting four cases of advertising and/or canvassing had been dealt with and brought to a satisfactory conclusion.

Credit Cards Unacceptable

A letter had been sent to the managing director of the Fichel Club, Great Britain, Ltd., informing him of the Council's objection to credit-card schemes, and the director's attention had been drawn to the fact that there was a reference to "chemists" in the circular letter issued by the company. It was resolved that the Council's views should be reiterated to the company, and that it should be asked not to refer to "chemists" in future publicity material.

Cheque Guarantee (Insurances), Ltd., had asked whether pharmacists might exhibit a sign advertising its cheque guarantee service, and it was resolved to inform the company that the display of such a sign by a pharmacist was not acceptable.

A letter from the south regional manager of Diners Club, Ltd., had suggested that the Diners Club system did not conflict with the Council's views on credit cards, but the committee resolved that the regional manager's arguments could not be accepted.

The Committee had received information that a yellow classified section was to be included in future telephone directories. Thomson Directories, Ltd., who were under contract to the General Post Office for the publication, had circulated subscribers in the Guildford area with a proposed list of classified headings. The company had been informed of certain inaccuracies in the proposed headings and advised that the Society preferred that chemists should be

listed under "Pharmacies," with a cross reference to the section under "Chemists—Retail." The Committee had been asked to consider the advice to be given to pharmacists in connection with the entries in those directories, and had recommended that entries in the classified section of telephone directories should be in standard print only.

A letter from the British Medical Association had drawn attention to the distribution from door to door of a circular letter issued by Chesebrough-Pond's, Ltd., advertising Complex D eight-hour cough formula and signed by "Dr. A. W. Middleton, Ph.D., F.R.I.C., General Manager, Research & Development." The matter had been discussed subsequently with a representative of the British Medical Association, who had stated that letters on the subject would be sent to the Proprietary Association of Great Britain and the Committee on Safety of Drugs; copies would be sent to the Society for information. The B.M.A. objected to the use of the title "doctor" in connection with a medicine, and the Committee recommended that a letter should be written to the Proprietary Association of Great Britain in support of the B.M.A.'s letter.

The recommendations were adopted.

The minutes of the meeting of the Benevolent Fund Committee presented by its chairman (MISS M. A. BURR), revealed that invitations to serve as local members of the Birdsgrove House Committee for the next twelve months had been accepted by Messrs. T. Heseltine, R. Neal Morris, F. Orrell and C. E. Turner. Grants were reported made or recommended to three members, four widows of members, and in respect of two orphans.

Blackpool Topics Deferred

The report of the Organisation Committee contained a recommendation that the subjects to be discussed at the professional sessions at the Blackpool Conference should be "The Pharmacist's Responsibilities to the Professions and the General Public" and "The Pharmacist and the Supply of Veterinary Medicines," but on the motion of THE PRESIDENT, who thought the matter needed further consideration, it was referred back.

Pharmaceutical Society of Ireland

MONTHLY MEETING OF COUNCIL

THE Council of the Pharmaceutical Society of Ireland at its monthly meeting in Dublin on January 10 decided to modify (a) the entrance requirements, and (b), the point of entry to the professional course for students proceeding to the degree of B.Sc.Pharm.

The Council had been considering the report on the College of Pharmacy submitted by Dr. Frank Hartley and Professor H. Beckett, which has been under examination by the Education Committee for some time. The Committee recommended that entrance requirements should be widened to permit a student to offer Greek or a modern Continental language as an alternative to Latin in the matriculation examination of the National University of Ireland. It also recommended that students should be permitted to take mathematics as an alternative to botany in the group of subjects in the first year of the course. [Currently subjects taken in the first year comprise experimental physics, chemistry, botany and zoology.]

Registration of Students

Another recommendation agreed to by the Council was that students should be required to register for pharmacy at the beginning of the second and not at the beginning of the first year, the effect being to allow a student to enter the Science Faculty in University College, Dublin and defer a decision on whether he would adopt pharmacy as a career until he had passed his First Science examination. The arrangement is hoped to provide a greater pool of students on which the College of Pharmacy may draw.

MR. R. J. POWER felt that the proposal might have the effect of attracting fewer students to pharmacy and Messrs. KENNELLY and O'DONNELL supported that view.

THE PRESIDENT (Mr. M. J. Cashman) and other members considered that the changes were just as likely to have the opposite effect, Mr. Cashman pointing out that, up to the present, students had been known to leave pharmacy at the end of the first year. They had also been known to enter at the same stage, and he considered it reasonable that the pattern might continue. In view of the greater number eligible to enter under the new arrangement, the College of Pharmacy might expect a bigger number of students opting for pharmacy in preference to a general science degree.

Control of Sale Regulations

When it meets the Minister for Health shortly in connection with the proposed new Health Services, a deputation from the Council is seeking further clarification of the Medical Preparations (Control of Sale) Regulations, 1966.

That was decided following consideration of Article 9 of the Regulations—a new provision in that it provides for the enforcement and execution of the regulations by health authorities and their authorised officers. A memorandum from the Department on the new regulations indicated that Article 9 requires chemists and druggists to make available for inspection by authorised officers of the Minister and of Health authorities and by inspectors of the Pharmaceutical Society of Ireland any prescriptions in

their possession. "While it would be open to health authorities to take action on their own initiative, the main purpose of the provision is to enable health authorities to co-operate with the Pharmaceutical Society, which has no power of enforcement under the Health Acts in cases of breaches or suspected breaches of the regulations which are brought to the notice of the health authorities or its inspectors . . . For example, the health authorities may find it expedient from time to time, in particular cases, to authorise one of its whole-time pharmacists to inspect a chemist's or druggist's file of prescriptions for the purpose of obtaining evidence of a breach of the regulations . . . Any evidence so obtained or furnished by the Society or its inspector should be submitted to the health authority's legal adviser for the purpose of considering the prosecution of any offence committed." The registrar explained that a copy of the memorandum had been sent by the Department to all local authorities.

THE PRESIDENT commented that, while the memorandum helped to allay some fears, he was not altogether happy in regard to the method of inspection. He would not like a situation to arise in which an individual in a health authority would have power to act without the curtailing influence of a committee. That aspect of the regulations was broadly what the Council had requested, but it appeared to go a little further. He hoped the memorandum would prevent any dangers of abuse arising. Under the new Control of Sale Regulations, as distinct from the Poisons Act, the Society had no power to act. At present the Minister could act only through the health authorities, and the memorandum was intended to clarify the position for them. Inspection of pharmacies would be confined to

full-time pharmacies in the employ of local authorities.

Replying to MR. V. G. McELWEE, THE REGISTRAR said that the whole idea was to help out the Society in the observance of the regulations. The work of inspection should not be carried out by a civil servant or clerk. It could be done by a whole-time pharmacist or medical practitioner.

When MR. McELWEE said he would not like anybody who was not qualified to inspect his books, THE PRESIDENT said they had already expressed their resentment at the possibility of anybody other than a pharmacist carrying out such inspections.

MR. T. J. HARTY asked whether, if a pharmacist refused to allow a non-qualified person to inspect his files — irrespective of the memorandum — the regulations would be against him.

THE PRESIDENT: That is a very good question but in practice county managers rely on the Department of Health to help them interpret the regulations.

MR. R. J. POWER remarked that few full-time pharmacists were employed by local authorities, and MR. McELWEE intimated that he intended to ask the Donegal Pharmacists' Association to discuss the regulations with the county manager in order to have the position clarified.

MR. D. J. KENNELLY pointed out that pharmacists were experts in that particular field, and could see possible dangers and abuses which the health authorities might not see. The regulations were only temporary and would be disposed of when the recommendations of *Comhairle na Níneanna* were finally implemented. "I do not think the year will go by without the Poisons Laws being signed."

(To be concluded)

Preparation of Eye Drops

A SURVEY OF THE PRINCIPLES AND PRACTICE

AN audience of at least 350 crowded into the hall (and two ante-rooms) of the Pharmaceutical Society's headquarters in London on January 11 to hear a lecture on "Eye Drops" by MR. G. SMITH, B.Sc., F.P.S. Mr. Smith, now a member of the teaching staff of Heriot-Watt University, was formerly in the Society's Department of Pharmaceutical Sciences. A summary of the paper is given below:—

ONLY in the past twenty years has serious attention been paid to the formulation of eye drops on scientific principles, the increasing interest being attributable partly to greater appreciation of the importance of pharmaceutical formulation on the clinical effects of drugs and partly to the growing awareness of the dangers of infected eye drop solutions.

Need for Sterility

By far the most important factor in the formulation of eye drops is sterility. Many eyes have been needlessly lost or damaged through microbial contamination of ophthalmic solutions. Contamination of eye drops can occur: (1) during preparation (from the water, ingredients, container, apparatus, the atmosphere, or operator); and (2) during storage and use (from atmosphere, patient, or lack of care in use).

The natural protective mechanisms of the eye include blinking and the secretion of tears (which contain lysozyme). The unbroken corneal epithelium provides an efficient barrier against bacteria, but eye drops are sometimes instilled into damaged eyes

in which the corneal epithelium is abraded. Injuries to the corneal epithelium can occur through incised wounds, foreign bodies, thermal burns, (from cigarettes, hot fluids, fragments of hot metals) and chemical burns (from acids, alkalis, mustard oil). Corneal abrasions may occur during tonometry and through the use of badly fitting contact lenses. Sometimes a small corneal abrasion may not be detected in an apparently healthy eye. If the epithelium is abraded, bacteria present in any solution applied to the eye can pass into the underlying substantia propria (stroma), which constitutes an excellent culture medium, and the bactericide may be inactivated. Rapid growth of pathogenic organisms can quickly lead to corneal ulceration. Potentially the instillation of contaminated eye drops constitutes a greater danger than the intravenous injection of a contaminated solution, since the cornea is non-vascular and lacks the normal antimicrobial defences of the bloodstream. Of the bacteria that may cause serious damage, *Pseudomonas aeruginosa* is the most notorious, but others, such as *Staphylococcus aureus* and *Proteus vulgaris*, are also common causes of infection. Fungi and viruses may also cause infections and damage to the eye. *Ps. aeruginosa* is particularly dangerous, since it is highly pathogenic and relatively resistant to heat and to chemical bactericides. It has been shown that *Ps. aeruginosa* produces an enzyme which degrades collagen. It is a Gram-negative organism that is widely distribu-

ted in nature and has simple nutritional requirements. Laboratory stocks of distilled water are frequent sources of contamination with this organism, which also grows in solutions of many drugs. As few as fifty organisms have caused experimental ulcers in laboratory rabbits.

The necessity for eye drops to be sterile is now agreed, and the B.P.C. Supplement, 1966, specifies that aqueous eye drops, except those of mild silver protein and silver protein, must be capable of complying with sterility tests at the time of dispensing. Those two exceptions may be prepared only by an aseptic technique and must be made freshly. Nor are oily eye drops of physostigmine, which are directed to be prepared aseptically, required to comply with sterility tests.

The choice of a method for sterilising eye drops depends upon the stability of the drug, the nature of the container, and the scale of operation and facilities available in the pharmacy or manufacturing laboratory. The B.P.C. recommends three general methods: autoclaving; filtration; and heating at 98–100°C. ("steaming") in the presence of a bactericide. Where those methods cannot be applied, as in oily eye drops, the drug is dissolved in the sterilised vehicle, using aseptic technique. Eye drops may be prepared by any other method provided that the final product is identical in appearance, quality, and composition with one prepared by the methods described in the individual monograph. Radiation sterilisation may be used in industry.

Bactericides

Most eye drops are dispensed in multi-dose containers, hence protection should be given against microbial contamination during use. The B.P.C. Supplement warns that they are not suitable for introduction into the anterior chamber of the eye during surgical procedures. "Solutions for the latter purpose should likewise be sterile but should not contain any preservative". The ideal bactericide would be rapidly effective in the cold against a wide range of organisms. In particular, the bactericide should be effective against *Ps. aeruginosa* (but the capacity of this organism to develop resistance to bactericides complicates evaluation), it should be non-irritant, non-toxic, compatible with a variety of drugs, and withstand heat sterilisation. At present, no single bactericide fulfils all the above criteria, and in the B.P.C. a choice is permitted, wherever compatibility allows, from a short list of the following bactericides for which there is an acceptable scientific basis for use in eye drops:

Phenylmercuric nitrate or acetate (0.002 per cent.). Extensively used in eye drops and in injections. "Mercurialentis" reported after continuous use of drops for at least three years, but seems harmless. Avoided for the miotics physostigmine and pilocarpine, which are prescribed for glaucoma and often used by a patient for many years.

Benzalkonium chloride (0.01 per cent.). Used extensively in the U.S.A. Has been said to "dissolve the intercellular cement of the corneal epithelium," based (the speaker thought) upon a misunderstanding of published work in which an anionic detergent, in a concentration of 1 per cent., damaged the cornea.

Chlorhexidine acetate (0.01 per cent.). Much used in Australia. Shown that slight degradation to 4-chloroaniline occurs on autoclaving (though tests suggest not harmful at the low concentration used in ophthalmic solutions). Toxicity of autoclaved solutions being further investigated.

Other bactericides which have been used in eye drops include: *Hydroxybenzoates*. Formerly used in the form of solution for eye drops. Relatively ineffective against bacteria unless almost saturated solutions are used, where they are too irritant for instillation in the eye. Solution for eye drops was relatively non-irritant and was slowly effective but not against a high contamination of micro-organisms. Hydroxybenzoates have been shown to be used by one strain of *Ps. aeruginosa* as the sole source of carbon. *Chlorocresol*. Reported effective in a concentration of at least 0.05 per cent. but said to cause more smarting than some other bactericides. *Chlorbutol*. Slowly effective in a concentration of 0.5 per cent., but this concentration is fairly close to its saturation point and crystals may be deposited in cold weather. Volatile, unstable in solutions of pH 6 and above. Recent work has shown that disodium edetate enhances the activity of polymyxin-B sulphate, benzalko-

nium chloride, and chlorhexidine, and it is this approach which seems likely to be of practical value in the future.

Chemical Stability

Nearly all drugs decompose a little on autoclaving or on storage and a decision has to be taken on each particular solution on whether the extent of decomposition is acceptable. A decomposition of 10 per cent. has been suggested as an appropriate limit for pharmacopoeias provided that the degradation products are no more toxic than the drug itself. Most drugs used in ophthalmology are salts of weak bases and strong acids, and tend to hydrolyse on autoclaving. Hydrolysis usually proceeds according to a pseudo-first-order reaction, and it is often possible to predict the stability of heated and stored solution from kinetic studies. Most reactions of this nature are catalysed by hydroxyl ions and sometimes by hydrogen ions in addition. Sometimes ionic species, such as citrates or phosphates act as general acid-base catalysts, e.g. in chloramphenicol eye drops. Stability of many drugs is affected by alkali leached from soda-glass or from rubber teats.

Hydrogen-ion Concentration

In addition to the effect of pH on stability we must consider its effect on clinical response and pain. Many drugs are absorbed by physical diffusion of unionised molecules through the cornea which has the physico-chemical properties of a lipid membrane. Since therapeutic activity then depends upon the amount of unionised base present, ideally we should prepare solutions of pH 7 or over. But stability is usually very poor in alkaline solution. Fortunately, tears (containing carbonic acid, weak organic acids, and proteins) have the buffer capacity to adjust rapidly the pH of most instilled unbuffered solutions to 7.4. Thus, unless the instilled solution has itself a high buffer capacity, the unionised organic base is rapidly made

available. The flow of tears increases when a foreign substance is instilled in the eye, and only one or two drops of solution are usually instilled. Pain is increased if the eye drops are highly buffered at a low pH. Some strongly acidic drugs such as pilocarpine salts and adrenaline acid tartrate may cause pain or irritation; the duration of pain appears to depend upon the volume of tears required to adjust the pH to 7.4. The U.S. National Formulary recommends a 2 per cent. boric acid solution as a vehicle (pH 4.7) for many eye drops. At this "compromise" pH most drugs are relatively stable and the buffer capacity is low. Perhaps a similar approach may be made in future editions of the B.P.C.

Increase in viscosity of eye drops by the addition of methylcellulose or hydroxypropylmethylcellulose or sodium carboxymethylcellulose (0.5 - 1 per cent. of a high-viscosity grade such as 4500 cps) has been reported to prolong the contact time of the drug with the cornea. Perhaps as a result, the concentration of drugs may be enabled to be reduced.

Tonicity

Until recently, far more attention has been given to the supposed need for tonicity of eye drops than has been given to sterility. It is now recognised that the eye can tolerate a wide range of tonicity (at least 0.5 - 2 per cent. of sodium chloride) before pain or discomfort is experienced and before damage to the corneal epithelium is sustained. The pain attributed to hypo- or hypertonic solutions is more likely due to properties of the drug itself. For example, many local anaesthetics (for example amethocaine), have surface-active and protein-denaturing properties which can lead to pain on instillation, especially in high concentration. In most monographs on eye drops the Codex no longer includes sodium chloride to render the solution isotonic.

(To be concluded)

SHOULD DOCTORS DISPENSE?

Tavistock pharmacist resigns because he thinks not

DISSATISFIED with the lack of response by the local Executive Council to his complaints that local doctors were dispensing for patients within the "one mile limit," Mr. E. H. Knappe, M.P.S., Market Pharmacy, Tavistock, Devon, ended his National Health Service contract on December 1, 1966.

Local newspapers gave considerable prominence to Mr. Knappe's resignation, and quote him as saying that he had lost 25 per cent. of his prescriptions [period unspecified] owing to doctors' dispensing, which he said occurred a great deal in Cornwall. The reporter on one of the local papers found supporting evidence in Launceston, where Mr. R. Parkes claimed a fall of 50 per cent.

Mr. Knappe is also said to have complained that doctors were dispensing "cheap continental antibiotics" while charging the Executive Council full Drug Tariff price. In his own words "The Executive Council are being

caught for anything between £10,000 and £20,000 a year," though he conceded that doctors were probably not deliberately committing fraud. Mr. Knappe further complained that dispensing doctors were employing unqualified persons to make up prescriptions. A reply by Dr. G. Hayes (Press secretary, Plymouth Division, British Medical Association) is understood to have admitted that dispensing in surgeries was done by people who were not fully qualified, but to have countered by pointing out that often the people employed in chemists' shops were not qualified. The amount of remuneration doctors received for dispensing was, said Dr. Hayes "pretty miserable and from the financial point of view worthless."

Mr. Knappe, who is understood to have almost completed the writing of a book on his N.H.S. experience, was also recently interviewed by the B.B.C. in "Spotlight—South-West."

TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into stock. Crude drugs and essential oils vary greatly in quality and higher prices are charged for selected qualities.

LONDON, JANUARY 18: So far this year trading in all markets has been at a disappointing level. Buyers are reluctant to enter into any commitment unless it is absolutely necessary.

Nevertheless some CRUDE DRUGS, through shortage of supplies and demand from other countries, continued to rise in price. The price of CANADA BALSAM on the spot rose by a further 2s. per lb. to the already increased level of the previous week. HYDRASTIS was marked up by 2s. 6d. per lb. and Italian SQUILL by 10s. per cwt. IPECACUANHA from all sources was lower by sixpence per lb. on the spot and by one shilling to 1s. 6d. for shipment. Easier in the forward position, but unchanged on the spot, were KOBÉ AGAR (down sixpence per lb.) CHERRY BARK (one penny per lb.) and QUILLAIA (5s. per cwt.). MENTHOL was reported to be held closely for prompt delivery, with lower prices restricted to deliveries from March onwards. Among SPICES, NUTMEGS and TURMERIC were easier but CARDAMOMS were considerably firmer at origin. Heavy rains in certain parts of the SENNA growing area of India were reported to have destroyed some of the plants. Shipment of Tintinelly PODS and LEAVES from Tintinelly during December 1966 were:

	U.K.	U.S.	Europe
SENNA	tons	tons	tons
LEAVES	12	22	115
PODS	3	—	75

IN ESSENTIAL OILS shipment rates were again being quoted for BOIS DE ROSE after an absence of several weeks, but they were less attractive than the spot price. Chinese CITRONELLA was a penny per lb. lower in both positions, while PEPPERMINT for shipment was threepence per lb. down for both Chinese and Brazilian. Chinese ANISE, however, was marked up by threepence per lb. and LEMONGRASS by ninepence per kilo. East Indian SANDALWOOD was again available for shipment, but the position of the Mysore variety is now nominal.

Following lower prices for QUININE ALKALOID and SALTS effective as from the beginning of the month, makers have also announced lower prices for QUINIDINE ALKALOID and SULPHATE.

Pharmaceutical Chemicals

ADRENALINE.—(Per gm.). Synthetic B.P., 1-kilo lots, 1s.; 500 gm. is 1s. 2d. ACID TARTRATE, B.P., 1 kilo, 8½d.; 500 gm., 10d.

ALON.—Micro-crystalline, 14-lb. lots, 34s., per lb.

AMINACRINE HYDROCHLORIDE.—B.P. is £24 per kilo.

ANTIMONY SALTS.—TRICHLORIDE, SOL., B.P.C., 1934, carboys, 6s. 1d. per kilo; FLAKE, 14s. 4d. per kilo.

ATROPINE.—Per oz. for 16-oz. lots: ALKALOID and METHONITRATE, 39s.; METHYLBROMIDE, 38s. 6d.; SULPHATE, 34s. Equivalent rates per kilo are: 1,375s., 1,375s. and 1,198s. 6d. respectively.

BENZAMINE LACTATE.—In 500-gm lots, 1,023s. per kilo.

BENZOCANE.—B.P. is 13s. 2d. per lb. in 1-cwt. lots.

BISMUTH SALTS.—(Per kilo):—

Quantity	Under 50	50	250
	s. d.	s. d.	s. d.
CARBONATE ...	77 10	76 0	75 0
SALICYLATE ...	72 4	70 6	—
SUBGALLATE ...	67 10	66 0	—
SUBNITRATE ...	71 10	70 0	69 0

BORAX.—B.P. grade, 1 ton and upwards in sacks. Granular, £56 10s.; crystals, £60; powder, £61; extra fine powder, £62 per ton. Less £1 in paper bags. Commercial from £46 10s. to £53 per ton as to type and packing. Anhydrous borax is £61 10s. 0d. in paper bags, c.p. in Great Britain. Surcharge for small quantities: Less than 1 ton but not less than 10 cwt., 2s. per cwt.; 5 to 9 cwt., 10s.; 1 to 4 cwt., 20s.

BROMIDES.—Crystals (per kilo):—

	Under 50 kilos	50 kilos
	s. d.	s. d.
POTASSIUM* ...	6 3	5 8
SODIUM ...	6 3	5 8
AMMONIUM ...	7 2	6 7

*Powder is fourpence per kilo more.

BRUCINE.—In 1,000-oz. lots, ALKALOID is 19s. per oz. and SULPHATE, 16s. per oz.

CALAMINE.—50-kilo lots, 4s. 3½d. per kilo; 1,000 kilo, 4s 2½d. kilo.

CALCIUM CARBONATE.—B.P. light precipitated powder, 1-ton lots, £37 10s. per ton in free bags, ex works. PREPARED powder, £22 10s. per ton.

CALCIUM CHLORIDE.—Fused, 3s. 11d. per kilo in 12½-kilo tin for 100-kilo lots.

CALCIUM GLUCONATE.—1-4 cwt., 4s. 3d. lb.; 1-ton, 4s.

CALCIUM LACTATE.—B.P. is £412 per 1,000 kilo for 250-kilo lots.

CANTHARIDIN.—Per kilo 11,511s.

CARMINE.—One-cwt. lots are quoted at 180s. per lb.

CHARCOAL.—Medicinal activated, B.P.C. n 1-cwt. lots, £22 10s. per cwt.

CHLORAL HYDRATE.—One-cwt. lots quoted at 4s. 4d. per lb.

CHLOROCRESOL.—Pharmaceutical quality, 7s. 7d. per lb. (1-cwt. lots).

CHLOROFORM.—35-litre lots in winchesters, B.P., 11s. 5½d. per litre; in drums, 10s. 7d.; 175-litre lots, 11s. and 10s. 1½d.

CHLOROPHYLL.—Water soluble, 100 per cent. (medicinal grade), 250s. per lb.; oil soluble, 25s. per lb.

CHLORPHENESIN.—50-kilo lots are 72s. 6d. per kilo.

CINCHOCAINE.—HYDROCHLORIDE, B.P., is 850s. per kilo.

GLYCERIN.—B.P. (per cwt.).

	Over 25 tons	5 tons and under 25 tons	1 ton and under 5 tons	Under 1 ton
	s. d.	s. d.	s. d.	s. d.
TANK WAGONS				
10-14 tons	196 0	—	—	—
5-10 tons	196 6	199 6	—	—
DRUMS				
5 cwt.	200 0	202 0	205 0	211 0
22 cwt.	203 0	205 0	208 0	214 0
TINS				
56 lb.	207 0	209 0	212 0	218 0
28 lb.	229 0	231 0	236 0	245 0
14 lb.	233 0	235 0	240 0	249 0

Minimum delivery 2½ cwt. Drums charged and returnable. Tins and cases free. Minimum terms for technical grade glycerin s.g. 1.2627 are 191s. per cwt. for lots of over 25 tons in bulk deliveries of 10-14 tons.

GUAIACOLS.—LIQUID, B.P.C., 16s. per lb. for 1-cwt. lots; CRYSTALS, 15s. 9d.; CARBONATE, 18s.

HYPOPHOSPHITES.—Per kilo:—

Quantity	1 kilo	12.5 kilos	50 kilos
	s. d.	s. d.	s. d.
CALCIUM, B.P.C.	17 2	16 1	15 1
IRON, B.P.C. ...	34 10	33 7	32 5
MAGNESIUM ...	29 3	28 2	27 2
MANGANESE, B.P.C.	35 3	33 11	32 9
POTASSIUM, B.P.C.	23 1	22 5	21 4
SODIUM, B.P.C. ...	19 2	18 1	17 1

PARACETAMOL.—One-ton lots are 10s. 2d. per lb.

QUINIDINE.—SULPHATE, 1,200s. per kilo (or 3,400s. per 100-oz.) for 15 kilos (500-oz.) lots upwards. ALKALOID is 1,382s. 9d. kilo, or 3,919s. 9d. per 100-oz. for similar quantities.

QUININE.—Spot quotations for 1,000-oz. lots per kilo (and in brackets per oz.) are: ALKALOID, 661s. 6d. (18s. 9d.); BIHYDROCHLORIDE, 646s. 9d. (18s. 4d.); BISULPHATE, 470s. 5d. (13s. 4d.); HYDROBROMIDE, 605s. 7d. (17s. 2d.); HYDROCHLORIDE, 635s. (18s.); SULPHATE, B.P. 1963, 523s. 3d. (14s. 10d.).

THEOBROMINE.—ALKALOID from 25s. 11d. per kilo., c.i.f.

THEOPHYLLINE.—B.P., 50-kilo lots, 31s. per kilo; HYDRATE, B.P., 30s. and AMINOPHYLLINE, 30s. per kilo.

THYMOL.—One-cwt. lots are 11s. 3d. per lb.

ZINC CARBONATE.—25-kilo lots, 4s. 7d. per kilo.

ZINC CHLORIDE.—B.P.C. 1959, sticks, 19s. 2d. per kilo.

ZINC OXIDE.—Two-ton lots, B.P. grade, are now £131 10s. per ton; 1 ton, £132 10s.

ZINC PEROXIDE.—One-cwt. lots of B.P., 5s. 3d. per lb.

ZINC SULPHATE.—B.P., 50 kilos, 3s. 6½d. per kilo.

Industrial Chemicals, Solvents

ACETALDEHYDE.—The 100 per cent. is £122 per ton minimum 1-ton lots.

ACETATES.—Per ton, spot in drums: AMYL, technical, £251 and B.S.S., £253. BUTYL, £128; ETHYL, £103; ISOBUTYL (80 per cent.), £105 and pure, £108; ISOPROPYL, £100; METHYL, 80 per cent., £142.

ACETIC ANHYDRIDE.—12-ton lots £103 per ton; 2½-ton, £107, tanker deliveries.

ACETONE.—One-ton lots spot £68 per ton in drums.

N-BUTYL ALCOHOL.—One-ton lots in drums, £123 per ton and one-drum lots, £132 per ton.

CARBON TETRACHLORIDE.—Four-ton lots, in drums £84 per ton.

ISOPROPYL ALCOHOL.—Technical grade (99 per cent.) in tank car lots from 4s. 6d. to 4s. 8d. per gall.

METHYL ETHYL KETONE.—One-ton lots, £103 per ton. One-drum lots, to 112 ton.

NAPHTHALENE.—Contract rates for large quantities of phthalic grade are about £24 per ton in bulk, ex works. Supplies are short and spot lots are sought at £40-£50 ton.

PHTHALATES.—Prices (per ton) one-ton lots in drums: DI-BUTYL, £153; DI-ISOBUTYL, £148; DI-ETHYL, £171; DI-METHYL, £161.

PHTHALIC ANHYDRIDE.—Domestic material ex contract, from £38 per ton.

STEARATES.—Minimum 1-ton lots, ALUMINIUM (No. 1), £243 10s. per ton and (non-gel.), £281; CALCIUM (precipitated), £243 10s.; LEAD (30 per cent.), £245; MAGNESIUM (standard), £257 and (super-fine), £287, ZINC, £246 to £276 as to grade,

Crude Drugs

ACONITE.—Short on spot. Spanish *napellus* quoted at 3s. 6d. per lb.; no shipment offers.

AGAR.—Kobe No. 1, 23s. 6d. per lb. in bond; shipment, 22s. 3d., c.i.f.

ALOE.—(Per cwt.). Cape primes, spot, 235s.; shipment, 225s., c.i.f. and Curacao, 395s. spot; shipment, 375s., c.i.f.

ANISE.—Chinese star, 145s. per cwt. spot, duty paid, f.a.q. for shipment, 117s. 6d., c.i.f.

ANNATTO.—Madras, f.a.q. seed, spot, 235s. per cwt.; shipment, 225s., c.i.f.

ASAFOETIDA.—Persian quoted at £19 cwt.

BALSAMS.—(per lb.): CANADA: Shipment, cleared; spot, 33s. COPAIBA: B.P.C. spot, 12s. 6d.; shipment, 7s. 6d., c.i.f.; PERU: 16s. 3d., spot; shipment, 13s. 6d., c.i.f.; TOLU: B.P., from 12s. 6d.

BELLADONNA.—LEAVES, 4s. 3d. per lb., spot; shipment, 3s. 10d. c.i.f. HERB, 3s. 3d. spot; ROOT, 1s. 11d. per lb., spot; shipment, 1s. 9d., c.i.f.

BENZON.—Sumatra block B.P.C., spot £27 per cwt.

BUCHU.—Spot, 8s. 6d. per lb.; shipment cleared.

CALUMBA.—Mozambique root, 125s. per cwt. spot.

CAMPHOR.—B.P. powders for shipment, 4s. 4½d. per lb., c.i.f.; spot, 5s. 9d. duty paid.

CARDAMOMS.—(per lb.). Alleppy greens 21s. 6d., spot; shipment 17s., c.i.f. Prime seed, spot, 33s. 6d.; shipment, 32s., c.i.f.

CASCARA.—Spot, 245s. per cwt.; shipment, new peel offered at 245s., c.i.f.

CASSIA.—*Lignea*, whole for shipment, no offers; spot, 360s. per cwt., duty paid.

CHAMOMILE.—Belgian flowers, 15s. to 16s. per lb., spot; German type, 7s. 6d.

CHERRY BARK.—Thin natural, on spot from 3s. per lb.; shipment 2s. 9d., c.i.f.

CHILLIES.—Zanzibar, spot, 365s. per cwt., shipment, 300s., c.i.f.; Mombasa, 400s., spot; shipment, 300s., c.i.f.

CINCHONA BARK.—*Succubra* from 2s. to 2s. 6d. per lb. according to test.

CINNAMON.—Bark, Seychelles, 135s. cwt. spot; shipment, 107s. 6d., c.i.f.; Ceylon, quillings, 5s. 6½d. lb.

CLOVES.—Zanzibar, standard grade, spot quoted at 2s. 10½d. per lb.; shipment, 2s. 7½d., c.i.f.

COCHINEAL.—(Per lb.). Canary Isle silver-grey, 17s. 6d. spot, 16s. 6d., c.i.f.; black brilliant, spot, 20s. and shipment, 19s. 6d., c.i.f. Peruvian silver-grey, 13s., spot, and 12s. 6d., c.i.f.

DRAGONS BLOOD.—Spot offered at £25 cwt.

ERGOT.—Portuguese—Spanish, spot, 11s. per lb.; shipment, 10s. 6d. c.i.f., nominal, Continental, 9s., spot.

GINGER.—(Per cwt.). Nigerian split, 70s., spot; c.i.f. not offering; peeled, 170s., spot, shipment, 145s., c.i.f. African, spot, 220s., Jamaican No. 3, spot, 260s., shipment, not offering; Cochín, spot, 200s.; shipment, new-crop, 160s., c.i.f.

GUM ACACIA.—Kordofan cleaned sorts, 187s. 6d. per cwt., spot; shipment, 165s., c.i.f.

HONEY.—(Per cwt., c.i.f.). Australian light amber, spot, 115s. to 120s.; and medium amber, 105s. to 110s. Argentine, 85s. to 90s.; Canadian, 170s. to 175s.; Mexican, 105s. to 110s.

HYDRASTIS.—Spot is 35s. per lb. No shipment offers.

IPECACUANHA.—Matto Grosso for shipment, 51s. 6d. per lb., c.i.f., spot, 54s. 6d. Costa Rican, 60s., spot; forward 56s., c.i.f. Colombian, spot, 52s. shipment, 50s., c.i.f.

JALAP.—Mexican whole bulbs, 3s. 9d. per lb. on spot; shipment, 3s. 6d., c.i.f. Brazilian, 1s. 9d., c.i.f.; spot, 1s. 11d.

KARAYA.—No. 1 f.a.q. gum, spot, 415s.; No. 2, 300s. per cwt.

LANOLIN.—ANHYDROUS, B.P. is from 2s. 2½d. to 2s. 6d. per lb. in 1-ton lots delivered free drums. Commercial grades from 1s. 4½d. and cosmetic, 2s. 8d.

LIQUORICE.—ROOT, Russian, 67s. 6d. per cwt.; Anatolian, 57s. 6d.; Anatolian decorticated, 170s. BLOCK JUICE: Anatolian, 210s. to 220s. per cwt.; Italian, 193s.; sticks from 244s. to 460s. per cwt.

LOBELIA.—Dutch on the spot, 4s. 6d. per lb.; shipment, 4s. 3d. c.i.f. American, 12s. per lb. spot and 11s., c.i.f.

LYCOPODIUM.—Indian triple-sifted, 8s. 6d. per lb., spot.

MENTHOL.—(Per lb.). Chinese shipment, 29s. 6d., c.i.f.; spot, 35s., duty paid. Brazilian for shipment, 29s., c.i.f.; spot, 34s., duty paid.

MERCURY.—Spot, £175 per flask of 76 lb., ex warehouse.

NUTMEGS.—(Per lb.). West Indian, spot defectives 5s. 3d.; sound unsorted, 7s. 6d., spot; 80s., 12s., East Indian for shipment, b.w.p., 3s. 8d., c.i.f.; 110's, 9s., c.i.f., 80's, 10s., c.i.f.

OLIBANUM.—Spot is from 195s. to 250s. cwt. as to grade.

ORANGE PEEL.—Spot: Sweet ribbon, 1s. 8d. per lb., bitter quarters: West Indian, 10½d.; Spanish, 4s. 9d.

PEPPER.—White Sarawak, 3s. 8d. per lb. spot; shipment, 3s. 3d., c.i.f. Black Sarawak, 2s. 8d. spot; shipment, 2s. 6d., c.i.f. Black Malabar, 300s. per cwt. c.i.f. Brazilian black No. 1, 2s. 11d. lb. duty paid.

QUILLAIA.—Spot is offered at 175s. per cwt. and shipment at 160s., c.i.f.

RHUBARB.—Various grades offered at from 12s. to 30s. per lb. spot.

SARSAPARILLA.—Jamaican native red, spot, 4s. 3d. per lb.; shipment, not offering.

SEEDS.—(Per cwt.)—ANISE.—Turkish, 187s. 6d., duty paid. CARAWAY.—Dutch, 157s. 6d., spot. CELERY.—Indian, 130s.-150s. spot; shipment, 137s. 6d., c.i.f. CORIANDER.—Moroccan, 115s.; Rumanian whole, 125s.; splits, 110s., all duty paid; shipment, Moroccan, 100s.; Rumanian splits, 85s., both c.i.f. It is reported that the crop of Rumanian whole seed has been sold. CUMIN.—Spot, Cyprian, 270s.; Indian, 260s.; Iranian, 240s., duty paid; shipment, Indian, 230s.; Iranian, 200s., c.i.f. DILL.—Indian is nominal at 115s.; shipment, 87s. 6d., c.i.f. FENNEL.—Chinese, 130s., duty paid. Indian, 140s.; shipment, Chinese, 110s., c.i.f.; Indian, 130s., c.i.f. FENUGREEK.—Moroccan, 80s., duty paid; shipment, 67s. 6d., c.i.f. MUSTARD.—English, 70s. to 85s. according to quality.

SENEGA.—Spot, 32s. 6d. per lb.; shipment, 32s. 6d., c.i.f., nominal.

SENNA.—(Per lb.) Tinnevely LEAVES, spot; Prime No. 1, 2s. 3d.; No. 3, f.a.q., 1s. 3d. Shipment; No. 3, 1s. 1d., c.i.f. PODS Tinnevely hand-picked quoted from 2s. 2d. to 2s. 4½d.; manufacturing, 1s. 3d., shipment, 1s. 2d., c.i.f. Alexandria PODS: Hand-picked spot, 5s. to 7s.; manufacturing, forward, 1s. 11d., c.i.f.; spot, 2s. 6d.

SLIPPERY ELM BARK.—Spot offered at 3s. 9d. per lb.

SQUILL.—Italian, spot, 135s. per cwt.; shipment, 120s., c.i.f.

STRAMONIUM.—Continental LEAVES, 85s. per cwt., spot.

STYRAX.—Spot, 24s. per lb.; shipment, 24s., c.i.f.

TONQUIN BEANS.—Para, spot, cleared; shipment, no offers.

TURMERIC.—Madras finger, 97s. 6d. per cwt., spot; shipment, 85s., c.i.f., quoted.

WAXES.—(Per cwt.). BEES'—Most sources nominal. CANDELILLA, spot, 465s.; forward, 460s., nominal. CARNAUBA, fatty grey, spot, 265s.; shipment, 260s., c.i.f.; prime yellow spot, 430s.; shipment, 395s., c.i.f.

WITCH HAZEL LEAVES.—Spot and shipment nominally 6s. 6d. per lb.

Essential and Expressed Oils

ALMOND.—Spanish sweet oil is 6s. 6d. per lb. spot.

AMBER.—Rectified on the spot, 1s. 6d. per lb.

ANISE.—Chinese 9s. 9d. per lb., spot, shipments, 9s. 4½d., c.i.f.

BAY.—From 41s. per lb. on the spot.

BERGAMOT.—Spot rates are about 108s. per lb. for consortium oil.

BIRCH TAR.—Rectified 10s. lb. on the spot.

BOIS DE ROSE.—Brazilian, spot, 18s. 6d. per lb.; shipment, 18s. 6d., c.i.f.

CAMPHOR, WHITE.—Chinese for shipment, 4s. 2d., c.i.f., per kilo; spot 2s. 6d. lb., duty paid.

CITRONELLA.—Ceylon spot 4s. per lb.; shipment, 3s. 8d., c.i.f.; Formosan 4s. 5d. in bond and 4s. 10½d. c.i.f.; Chinese 3s. 9d. in bond; 3s. 7½d. c.i.f.

CLOVE.—Madagascar leaf for shipment, 6s. 6d., c.i.f., spot, 6s. 9d., in bond. Rectified, 10s. Distilled bud oil, ENGLISH, B.P., 26s. per lb., for 1-cwt. lots.

EUCALYPTUS.—Chinese, 80-85 per cent., 8s. 9d. per kilo in bond; shipment, 8s. 3d., c.i.f.

FENNEL.—Spanish sweet, 16s. per lb., duty paid.

GERANIUM.—Bourbon, 85s. to 87s. 6d., spot; Algerian, 75s.

GINGER.—Imported (per lb.); Indian, 165s.; Chinese, 75s.; Jamaican, 132s. 6d.

GRAPEFRUIT.—West Indian small lots on spot at 12s. 9d. per lb. Florida, 14s.

LAVANDIN.—Spanish from 20s. to 27s. per lb., as to quality.

LAVENDER.—French from 40s. to 60s. per lb. as to quality.

LAVENDER SPIKE.—Spanish from 23s. 6d. to 28s. per lb. on the spot.

LEMON.—Sicilian from 26s. to 36s., spot.

LEMONGRASS.—Spot, 24s. 3d. per kilo shipment, 23s. 6d. c.i.f.

PATCHOULI.—Spot, 50s. to 52s. 6d. per lb., duty paid; shipment, 40s., c.i.f.

PENNYROYAL.—Spot, 15s. per lb. duty paid; forward shipment, offers at 17s. duty paid.

PEPPERMINT.—(Per lb.). *Arvensis*: Chinese for shipment, 10s. 3d., c.i.f.; spot, 10s. Brazilian for shipment, 9s. 9d., c.i.f.; spot, 10s. *Piperita*: Italian spot, 75s.; forward shipment, 82s. 6d. American from 36s. to 56s., as to source.

PIMENTO.—Imported BERRY, 110s.; English distilled, 390s.; LEAF, 24s. per lb.

RUE.—Spanish unobtainable on the spot.

SAGE.—Spanish, 21s. per lb.; Dalmatian 26s.

SANDALWOOD.—Mysore, spot, nominal. East Indian for shipment, 272s. 6d. per kilo, c.i.f.

SPEARMINT.—American oil on the spot, 74s. to 80s. per lb. Chinese, spot, 72s. 6d. per kilo, shipment, 68s. 6d. per kilo, c.i.f.

THYME.—Red, 27s. 6d. per lb., for 45-50 per cent., duty paid.

VETIVERT.—Bourbon, spot, 85s. per lb.

YLANG YLANG.—Best oil quoted about 135s.

UNITED STATES REPORT

NEW YORK, JANUARY 17: Among VITAMINS the price of ANEURINE HYDROCHLORIDE was reduced \$1.50 a kilo to \$4.00 and the MONONITRATE by \$1.25 to \$16.00. PYRIDOXINE was down \$2 at \$25.00 per kilo. BOLDO LEAVES rose six cents to 20 cents a lb. and STRAMONIUM was up four cents at 22 cents. CEDARWOOD OIL was boosted 10 cents to \$1.55 a lb.

TRADE MARKS APPLICATIONS ADVERTISED BEFORE REGISTRATION

"Trade Marks Journal," January 4, No. 4610

For enzymes for conversion of starch to dextrose, being chemical products for use in manufactures (1)

AMIGASE, 893,779, by Baxter Laboratories, Inc., Morton Grove, Illinois, U.S.A.

For chemical products used in agriculture, horticulture and forestry; manures (natural and artificial); none being for export to and sale in Puerto Rico (1) and for veterinary substances; insecticides; larvicides; fungicides; pesticides and herbicides; preparations for killing weeds and destroying vermin; none being for export to and sale in Puerto Rico (5)
CIOVAP, 891,716-17 by Shell International Petroleum Co., Ltd., London, S.E.I.

For cleaning preparations; detergents; essential oils; cosmetics; and aromatic substances for use in the manufacture of perfumes (3)
DOWA, B876,205, by Dow Chemical Co., Midland, Michigan, U.S.A.

For toilet preparations (not medicated), cosmetic preparations, dentifrices, depilatory preparations, toilet articles, sachets for use in waving the hair, soaps and essential oils (3)
CHAIRMAN, 888,537, by Stanley Home Products, Inc., Westfield, Massachusetts, U.S.A.

For cosmetics and non-medicated toilet preparations (3)
Device with words LONGCILS BONCZA, 894,057, by Les Parfums Robert Piguet, Paris, France.

For non-medicated toilet preparations, perfumes and cosmetic preparations (3)
HONEY GIRL, 894,136, by T. J. Smith & Nephew, Ltd., Hull, Yorks.

For non-medicated toilet preparations (3)
BLADES, 896,470, by Blades of Dover Street, Ltd., London, W.1.

For substances for laundry use; detergents (not for use in industrial or manufacturing processes); and soaps (3)
POLYFOAM, 897,946, POLYSCOUR, 897,949, by Gerard Brothers, Ltd., Nottingham.

For cosmetics, non-medicated toilet preparations, soaps, non-medicated preparations for use in the bath, shampoos and eau-de-Cologne (3) and for medicated preparations for the treatment of the scalp, feet and the skin; deodorant and antiperspirant preparations (5)
ROYAL CHACE, 881,324-25, by Gillette Industries, Ltd., Isleworth, Middlesex.

For cotton wool for cosmetic and toilet purposes and articles consisting of or incorporating cotton wool (3) and for cotton wool (pharmaceutical); medical and surgical plasters, surgical dressings, sanitary towels and sanitary clothing, all made of cellulose or of synthetic fibrous material; and babies' disposable napkins made principally of cellulose wadding (5)
VLEESIA, 893,321-22, by V-Vlies, A.G., Morschwil/St. Gallen, Switzerland.

For pharmaceutical substances sold in capsules coloured other than white or in colourless transparent capsules in which the goods are coloured other than white (5)

The Trade Mark consists of a single white coloured band surrounding the middle of the capsules in which the goods are sold. (A specimen of the mark may be seen at the Trade Marks Registry of the Patent Office), 882,650, by Parke, Davis & Co., Detroit 32, Michigan, U.S.A., and Hounslow, Middlesex.

For pharmaceutical substances sold in capsules (5)
The Trade Mark consists of a single white coloured band surrounding the middle of the capsules in which the goods are sold. (A specimen of the mark may be seen at the Trade Marks Registry of the Patent Office), 882,651, by Parke, Davis & Co., Detroit 32, Michigan, U.S.A. and Hounslow, Middlesex.

For anticholinergic preparations for human use (5)
GAZILE, 896,162, by A.B., Astra, Apotekarnes Kemiska Fabriker, Södertälje, Sweden.

For pharmaceutical preparations and substances, all containing antibiotics (5)
POLAMYCIN, 891,948, by Berk Pharmaceuticals, Ltd., London, W.1.

For insecticides, fungicides and herbicides (5)
LEKUSIT, 892,774, LEKTAN, 895,336, by Baywood Chemicals, Ltd., Bury St. Edmunds, Suffolk.

For pharmaceutical, veterinary and sanitary substances; medical and surgical plasters; material prepared for bandaging; disinfectants; preparations for killing weeds and destroying vermin (5)
DECAPENT, 896,947, by C. H. Boehringer Sogn, Ingelheim on Rhine, Germany.

For veterinary rejuvenating preparations containing a sulpanamide for the geriatric treatment of dogs and cats (5)
DEBENAL, 897,915, by Farbenfabriken Bayer, A.G., Bayerwerk, Leverkusen, Germany.

For analgesic preparations (5)
BICKIE-MOL, 898,344, by Bickiepegs, Ltd., Welwyn Garden City, Herts.

For veterinary preparations and substances (5)
SEDAVIC, 899,180, by Janssen Pharmaceutica, N.V., Beerse, Belgium; KYLOPHOR, 899,594, by Pan Britannica Industries, Ltd., Waltham Cross, Herts.

For barometers and thermometers (9)
WETHARET, 892,444, by Millman (Imports), Ltd., London, N.1.

For weighing apparatus and parts thereof (9)
GEMINI, 894,876, by Hollands & Blair, Ltd., Thornton Heath, Surrey.

For storage containers and storage boxes, all for photographic transparencies; mounting frames for photographic transparencies; spools and reels, all for photographic films, recording tapes and for data bearing tapes (9)
TREMA SYSTEM, 896,192, by Sven Anders Larsson, Sundbyberg 4, Sweden.

For photographic apparatus and instruments and parts and fittings (9)
DENSIPROBE, 898,669, by Sidney R. Littlejohn & Co., Ltd., London, N.7.

For optical photographic and cinematographic apparatus and instruments and parts (9)
BEAUTY CANTER, 898,675, SKYMATIC, 898,679, by Rosley, Ltd., Wembley, Middlesex.

For injectors (medical) and hypodermic syringes, none incorporating needles; and parts (10)
EPI-JET, 892,031, by Allen & Hanburys (Surgical Engineering), Ltd., London, E.2.

For surgical, medical and veterinary instruments and apparatus (10)
HOLPAK, 895,905, by E. R. Holloway, Ltd., Welwyn Garden City, Herts.

For apparatus and instruments for use by chiropodists; etc. (10)
DEBCOL, 896,488, by Ronald Leonard Laxton, London, S.E.19.

For surgical aspirators (10)
VIRILUM MULTIPOINT, 896,690, by Virilium Co., Ltd., London, N.1.

For surgical appliances for use in the treatment of hernia (10)
HERNITE, 899,274, by Le Brasseur Surgical Ltd., Birmingham, 5.

"Trade Marks Journal," January 11, No. 4611

For chemical preparations and substances, all containing zincium compounds and for use in the manufacture of perfumery, toilet preparations, dentifrices and of preparations for the mouth and teeth (1)
ZIRCONAL, 894,687, by Colgate-Palmolive Co., New York, U.S.A.

For chemical products for use in agriculture, horticulture and forestry; manures (natural and artificial); none of the aforesaid being starch or mustard refuse for use as manure and none being for export to and sale in Puerto Rico (1) and for veterinary preparations; insecticides, larvicides, fungicides and pesticides; preparations for killing weeds and destroying vermin; none of the aforesaid being mustard oil or preparations containing mustard; and none being for export to and sale in Puerto Rico (5)
SHELL TABARD, 867,212-13, by Shell International Petroleum Co., Ltd., London, S.E.1.

For non-medicated toilet preparations and cosmetic preparations (3)
SORBEX 24, 896,559, by Fulford Williams (International), Ltd., Toronto 2B, Canada, and Hatch End, Pinner, Middlesex.

For non-medicated toilet preparations for men (3)
Device with words MISTER L, B887,479, by Richard Hudnut, Morris Plains, New Jersey, U.S.A.

For non-medicated toilet preparations; cosmetic preparations; and preparations for the hair (3)
MATALON, B892,072, by Innova (England), Ltd., London, N.1.

For hair shampoos and hair preparations (3)
SUNNYSIDE UP, 894,343, by Revlon (Suisse), S.A., Zurich 5, Switzerland.

For soaps, perfumes, non-medicated toilet preparations, essential oils, cosmetics, hair lotions and dentifrices (3)
MIAPIA, VALSALVA, 895,438-39, by C. H. Boehringer Sohn, Ingelheim on Rhine, Germany.

For shampoos for animals (3) and for preparations in powder or spray form for destroying fleas and ticks (5)
PETAM, B885,227-28, by Smith, Kline & French Laboratories, Ltd., Welwyn Garden City, Herts.

For pharmaceutical substances sold in pellet form within capsules (5)
The Trade Mark consists of a maroon colour applied to one half of the capsule at one end, the other half being colourless and transparent, and yellow, blue and white colours being each applied to a substantial number of pellets so that each pellet is of one colour only, 849,766; the Trade Mark consists of a brown colour applied to one half of the capsule at one end, the other half being colourless and transparent, and dark orange, pale orange and white colours being each applied to a substantial number of pellets so that each pellet is of one colour only, 849,767; the Trade Mark consists of a green colour applied to one half of the capsule at one end, the other half being colourless and transparent, and green and white colours being each applied to a substantial number of pellets so that each pellet is of one colour only, 849,768; the Trade Mark consists of a dark grey colour applied to one half of the capsule at one end, the other half being colourless and transparent, and grey, red and white colours being each applied to a substantial number of pellets so that each pellet is of one colour only, 849,769; the Trade Mark consists of a black colour applied to one half of the capsule at one end, the other half being colourless and transparent, and lime green, blue and white colours being each applied to a substantial number of pellets so that each pellet is of one colour only, 849,770; the Trade Mark consists of a red colour applied to one half of the capsule at one end, the other half being colourless and transparent, and red and green colours being each applied to a substantial number of pellets so that each pellet is of one colour only, 849,771; the Trade mark consists of a pink colour applied to one half of the capsule at one end, the other half being colourless and transparent, and red, pink and white colours being each applied to a substantial number of pellets so that each pellet is of one colour only, 849,772; the Trade Mark consists of a dark blue colour applied to one half of the capsule at one end, the other half being colourless and transparent, and dark blue, pale blue and white colours being each applied to a substantial number of pellets so that each pellet is of one colour only, 849,773; the Trade Mark consists of a ruby red colour applied to one half of the capsule at one end, the other half being colourless and transparent, and dark orange, blue and white colours being each applied to a substantial number of pellets so that each pellet is of one colour only, 849,775; the Trade Mark consists of a yellow colour applied to one half of the capsule at one end, the other half being colourless and transparent, and dark blue, pale blue and white colours being each applied to a substantial number of

pellets so that each pellet is of one colour only, 849,776, by Smith, Kline & French Laboratories, Ltd., Welwyn Garden City, Herts. A specimen of the Marks may be seen at the Trade Marks Registry of the Patent Office.

PATENTS

COMPLETE SPECIFICATIONS ACCEPTED
From the "Official Journal (Patents)," January 4, 1967

N - (tertiary-amino-alkyl) - methylenedioxybenzamides and their preparation. Soc. d'Etudes Scientifiques et Industrielles de L'Ile-de-France. 1,058,514.

Contrast agent for medical use. Centre National de la Recherche Scientifique. 1,058,516.

Substituted piperazines. Kyorin Seiyaku, K.K. 1,058,520.

7-(α,β -unsaturated acylamino) cephalosporanic acid and derivatives thereof. Fiyisawa Pharmaceutical Co., Ltd. 1,058,535.

Nortropene derivatives and the preparation thereof. R. Pfeiffer. 1,058,542.

16-methylene-steroids. Organon Laboratories, Ltd. 1,058,543.

Quaternary salts of aromatic disulphonic acids and their use for combating phytopathogenic micro-organisms. Farbwerke Hoechst, A.G. 1,058,548.

Nitropyrolylheterocyclic derivatives. Smith Kline & French Laboratories. 1,058,565.

Hydroquinone derivatives for use as photographic developing agents. Eastman Kodak Co. 1,058,606.

Hydroxybenzotriazole glucamine salts and herbicidal compositions containing them. May & Baker, Ltd. 1,058,609.

Synthesis of compounds having an amide-bond. Organon Laboratories, Ltd. 1,058,620.

Cyanothioformylarylamides pesticidal preparations containing them. CIBA, Ltd. 1,058,622.

Piperazine derivatives, the preparation thereof and compositions thereof. Kyorin Seiyaku, K.K. 1,058,623.

Apparatus for inoculation against smallpox and the like. N.O.A. Peterson. 1,058,648.

Cyclic phosphine sulphides. Monsanto Co. 1,058,653.

Process for the preparation of biologically active amines and of salts thereof. Starogardzkie Zakłady Farmaceutyczne "Polfa." 1,058,672.

Derivatives of the antibiotic sparsomycin. Upjohn Co. 1,058,673.

Spiroalkane derivatives. Laboratoires Dausse. 1,058,675.

Antibiotic rubradirin. Upjohn Co. 1,058,686.

Nitrofurans derivatives. K. Miura. 1,058,694.

Biologically active compositions. M & T Chemicals, Inc. 1,058,701.

Benzdiaz [1,4] epines and a process for the manufacture thereof. F. Hoffman-La Roche & Co., A.G. 1,058,738.

Manufacture of bendiaz [1,4] epine derivatives. F. Hoffman-La Roche & Co., A.G. 1,058,739.

Surgical table. American Steriliser Co. 1,058,787.

Colour stable oxytetracycline compositions and process for preparing same. Chas. Pfizer & Co., Inc. 1,059,188.

Pyrrrolbenzothiazine compounds and production thereof. Centre National de la Recherche Scientifique. 1,058,811.

Process and apparatus for removing impurities from ethyl alcohol. W. H. A. Webb. 1,058,814.

Preparation of 1-alkyl-2-pyridinium-aldoxime salts. CIBA, Ltd. 1,058,820.

3-amino-2-hydroxypropoxy heterocyclic derivatives. Imperial Chemical Industries, Ltd. 1,058,822.

N - (5-nitro-2-furfurylidene) - 3-amino-2-oxazolidone. K. Visser and A. De Hoop. 1,058,824.

Method of producing an alkaline salt composition. Griffith Laboratories, Ltd. 1,058,826.

Purification of fat mobilizing substances. Organon Laboratories, Ltd. 1,058,827.

Process for the manufacture of artificial antigens. Behringwerke, A.G. 1,058,828.

Thiosemicarbazones of benzaldehyde compounds. Kabi, A.B. 1,058,835.

Tetrahydrofuranol derivatives. May & Baker, Ltd. 1,058,857.

Process for the preparation of alkenyloxysilanes. Rhone-Poulenc, S.A. 1,058,866.

Endotracheal catheter. W. Rusch and H. Rusch. 1,058,888.

Thickening water-immiscible liquids. Unilever, Ltd. 1,058,972.

Control of chemical reactions. Eastman Kodak Co. 1,058,979.

1-aryl-3-anilind-5-pyrazolone derivatives and their use in colour development processes. Eastman Kodak Co. 1,059,146.

British patent specifications relating to the above will be obtainable (price 4s. 6d. each) from the Patents Office, 23 Southampton Buildings, Chancery Lane, London, W.C.2, from February 15.

WORLD TRADE

Mexican Sulphur Exports. — Pan American Sulphur Co. has been granted an export permit covering 375,000 metric tons of sulphur for the first quarter of the year compared with 200,000 tons for the initial 1966 period. The company state that the increased export permit, coupled with higher prices, should ensure larger earnings for the period than last year's 16 cents per share. An intensive exploratory drilling programme in Mexico had resulted in discovery of substantial quantities of sulphur.

COMING EVENTS

Items for inclusion under this heading should be sent in time to reach the Editor not later than first post on Wednesday of the week of insertion.

Monday, January 23

ROMFORD BRANCH, PHARMACEUTICAL SOCIETY, May & Baker, Ltd., research building, Dagenham, at 7.45 p.m. Professor L. F. Lamerton on "The Society of Cells."

Tuesday, January 24

SCHOOL OF PHARMACY, LEICESTER REGIONAL COLLEGE OF TECHNOLOGY, at 7.30 p.m. Mr. E. G. Bain on "Insecticides (continued) and Acaricides." (Lecture course).

SCHOOL OF PHARMACY, LIVERPOOL REGIONAL COLLEGE OF TECHNOLOGY, Lecture theatre, Room 506, Byrom Street, Liverpool 3, at 8 p.m. Mr. J. W. Clitherow, (Allen & Hanburys, Ltd.) on "Drugs, enzymes and receptors" (lecture series).

SHEFFIELD BRANCH, PHARMACEUTICAL SOCIETY, Royal Victoria hotel, Sheffield, at 8 p.m. Members night.

SLOUGH BRANCH, PHARMACEUTICAL SOCIETY, Beech Tree hotel, Beaconsfield, at 8.15 p.m. Members' colour slides.

UNIVERSITY OF AUSTON IN BIRMINGHAM, Gosta Green, Birmingham, 4, at 5.30 p.m. Professor N. J. Harper (professor of pharmacy) on "Drugs and Society." (Inaugural lecture.)

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NEW COMPANIES

P.C.=Private Company, R.O.=Registered Office.

BUTES PHARMACY, LTD. (P.C.). — Registered December 30. Capital £100 in £1 shares. To carry on the business of dispensing chemists and druggists, etc. Directors: Victor Frome, and Anthony Frances, R.O. 23 Albermarle Street, London, W.1.

EDINBURGH HOSPITAL EQUIPMENT CO., LTD., (P.C.). — Registered at Edinburgh. To manufacture and deal in hospital equipment, etc. Capital £100. Directors: William H. Bidgood, 8 South Market Street, Edinburgh; James L. Cheyne; W. Hall, and Douglas Nickel.

H. SCOTT HARRIS, LTD. (P.C.). — Capital £500. To carry on the business of chemists, etc. Directors: Gideon S. Nicolson and Adelaide H. Nicolson. R.O.: 418 Hyde Road, West Gorton, Manchester, 12.

J. GEDDES (KNIGHTS HILL) LTD. (P.C.). — Capital £100. To carry on the business of consulting, manufacturing and general chemists, etc. Directors: John Geddes and Doris E. Geddes. R.O.: 56, Knights Hill, London, S.E.27.

JAMES E. RUSHTON, LTD. (P.C.). — Capital £1,000. To carry on the business of wholesale and retail chemists and druggists, etc. Directors: James E. Rushton, M.P.S., and Timothy J. Rushton, R.O.: 17 Main Street, Milnthorpe, Westmorland.

SCOTT ROSE & ASSOCIATES, LTD. (P.C.). — Capital £100. To carry on the business of manufacturing, exporting, importing and general chemists, etc. Directors: Diana Rose and Colin Rose. R.O.: 2, Suffolk Lane, Cannon Street, London, E.C.4.

LEEDS BRANCH, NATIONAL PHARMACEUTICAL UNION, Wakefield Metropolitan hotel, Leeds, at 8 p.m. Mr. H. Steinman (a member of the Executive) on "The National Pharmaceutical Union."

LINCOLN BRANCH, PHARMACEUTICAL SOCIETY, Eastgate hotel, Lincoln, at 7.45 p.m. Mr. W. M. Darling, (a member of Council) on "The Society's Attitude to Advertising, and the Work of the Ethical Committee."

NOTTINGHAM BRANCH, PHARMACEUTICAL SOCIETY, Victoria hotel, Nottingham, at 7.15 p.m. Annual dinner and dance.

REIGATE AND REDHILL PHARMACISTS' ASSOCIATION, Upjohn, Ltd., Crawley, at 8 p.m. Mrs. E. J. M. Leigh (a member of the Pharmaceutical Society's Council) on "Current Topics."

REINFORCED PLASTICS SUB-GROUP, NORTH-WESTERN SECTION, PLASTICS INSTITUTE, Nag's Head hotel, Jackson's Row, Manchester, 2, at 7.30 p.m. Dr. L. Temkin on "Skin and Health and Disease."

SOUTHEND-ON-SEA BRANCH, PHARMACEUTICAL SOCIETY, Overcliff hotel, Manor Road, West-cliff-on-Sea, at 8 p.m. "Wines and Sherries" a talk and tasting arranged by John Harvey & Sons, Ltd.

Friday, January 27

MERSEYSIDE BRANCH, NATIONAL ASSOCIATION OF WOMEN PHARMACISTS, Royal Institution, Colquett Street, Liverpool, at 7.15 p.m. Members' night.

WOKING BRANCH, PHARMACEUTICAL SOCIETY, Red House hotel, Woking, at 8 p.m. Social evening.

Courses and Conferences

EAST METROPOLITAN BRANCH, PHARMACEUTICAL SOCIETY. Refresher course of five lectures at various centres on Tuesday evenings from April 4 to May 9. Details from Mr. G. S. Wood, 92 Lower Park Road, Loughton, Essex. (Application forms are being circulated in March.)

Advance Information

INTERNATIONAL SPRING FAIR, Frankfurt on Main, Western Germany. February 26 to March 2.

Prescribers' Press

What doctors are reading about developments in drugs and treatments

INDUCTION of a mild haemolysis has been shown in animals and in man to produce a greater excretion of iron in cases of iron-storage disease treated with desferrioxamine B mesylate than when the latter drug is administered alone. Desferrioxamine is a chelating agent with a special affinity for iron, but generally no more than 20 mgm. of iron is removed per day whereas venesection (the usual treatment for iron overload) removes 230 mgm. in one pint of blood. The compound does not chelate iron bound to transferrin or haemoglobin iron in washed or haemolysed erythrocytes. However, in states of haemolysis the iron-protoporphyrin complex of haemoglobin is disrupted, resulting in an increased stimulus to erythropoiesis and mobilisation of stored iron. Workers at Gardiner Institute, Glasgow Western Infirmary, therefore considered that the induction of a mild haemolysis using phenylhydrazine might render more iron available for chelation. In guinea-pigs they found there was an eightfold urinary iron excretion and a fourfold excretion in the faeces. In seven patients, urinary excretion increased by 42 — 178 per cent. The authors say that the relevance of their observations cannot yet be defined, as it is first necessary to assess the total daily iron excreted (studies on human faecal excretion under the treatment are in progress) and to determine the frequency and degree of haemolysis that may be safely undertaken. However, they believe desferrioxamine plus induced haemolysis may provide a suitable alternative to venesection in the treatment of iron-storage disease. (*Lancet*, January 14, p. 71.)

THE value and side effects of indomethacin in the treatment of rheuma-

toid arthritis have been studied in a double-blind cross-over trial in thirty patients, reported from the United Cardiff Hospitals and Welsh National School of Medicine. The drug was given in capsule form in a dose increasing from 50 mgm. to 125 mgm. a day over a four-week period. It was not possible to show that indomethacin produced any antiphlogistic effect, and reduction of swelling and analgesic effects were shown to be the result of placebo and learning factors. Side effects occurred in eighteen patients while on indomethacin and in seventeen while on placebo. The authors believe that the actual incidence of side effects attributable to the drug is much lower than that would suggest. They infer that suggestion (through discussion between patients) played a large part in determining both the incidence and variety of the side effects encountered. (*B.M.J.* January 14, p. 69.)

THE "alarming increase" in non-therapeutically-induced drug dependence must not be allowed to withdraw attention from the possibility of causing dependence in patients as a result of unwise or ignorant prescription of dependence-producing drugs for therapeutic reasons, write Drs. R. Seymour-Shove (Clifton Hospital, York) and C. W. M. Wilson (University of Dublin). They report on two cases showing the features of dependence on dextromoramide (Palfium). In both cases the drug had just been prescribed for the relief of relatively slight or temporary pain but the patients' doses were stated to have increased to forty tablets weekly and seventy tablets daily respectively by the time they were admitted hospital. (*B.M.J.*, January 14, p. 88.)

CONTEMPORARY THEMES

Subjects of contributions in current medical and technical publications

DIURETIC THERAPY. Glucose tolerance in hypertensive patients on long-term diuretic therapy. *Lancet*, January 14, p. 61.

HYPERBARIC OXYGEN THERAPY. *Vet. Rec.*, January 14, p. 40.

PREVENTION OF TETANUS by antitoxin of bovine origin. *Lancet*, January 14, p. 76.

PENICILLIN. Mode of action of. *Nature*, January 14, p. 183.

DESFERRIOXAMINE. Effect of phenylhydrazine-induced haemolysis on the urinary excretion of iron after. *Lancet*, January 14, p. 71.

PHENOTHIAZINES. Failure of, in sickle cell anaemia. *J. Amer. med. Ass.*, January 3, p. 33.

SPIRONOLACTONE. Treatment of hypertension with. *J. Amer. med. Ass.*, December 12, 1966, p. 1143.

THIAZIDES. Prophylactic use of, in pregnancy. *J. Amer. med. Ass.*, December 12, 1966, p. 1150.

ANTI-MOTION-SICKNESS DRUGS. Effectiveness of. *J. Amer. med. Ass.*, December 12, 1966, p. 1155.

SALMONELLIN — a new colicin-like antibiotic. *Nature*, January 14, p. 184.

BIGUANIDES. Specific inhibition of gluconeogenesis by. *Nature*, January 14, p. 203.

GRANULATION OF LACTOSE. *Manf. Chemist*, January, p. 37.

A CHEMIST'S VIEW of cancer prevention. *Proc. roy. Soc. Med.*, January, p. 93.

ORTHODERMIC TALKS. Part 2. *S.P.C.*, January, p. 25.

INDOMETHACIN in rheumatoid arthritis: and evaluation of its anti-inflammatory and side effects. *Brit. med. J.*, January 14, p. 69.

DEXTROMORAMIDE. Dependence on. *Brit. med. J.*, January 14, p. 88.

SYNTHESIS OF INSULIN. *Science*, December 23, 1966, p. 1509.

DRUG RELEASE FROM OINTMENT BASES. *Amer. J. Pharm.*, October, p. 193.

CURRENT STATUS OF HALLUCINOGENS in the cactaceae. *Amer. J. Pharm.*, October, p. 204.

PRINT AND PUBLICITY PRESS ADVERTISING

COTY (ENGLAND), LTD., 3 Stratford Place, London, W.1: L'Aimant perfumed shampoo. In woman's monthly and weekly fashion magazines, mid-March to mid-May.

DIXOR, LTD., St. Leonard's Road, Mortlake, London, S.W.14: Velouty powder cream. In women's magazines.

JEYES GROUP, LTD., High Street, Plaistow, London, E.13. Jeys fluid. In *Practical Gardening*, *Amateur Gardener*, *Popular Gardening*, *Home Gardener*, and *Gardeners' Chronicle*.

SARAKAN PRODUCTS, LTD., 88 Harley House, Regents Park, London, N.W.1: Sarakar tooth-paste, in leading health journals and *Woman*, *Woman's Own*, *Queen*, *Vogue*, and *Vanity Fair*.

WHITWAYS CYDER CO., LTD., Whimble Devon. Sanatogen tonic wine. In women's magazines and national daily and Sunday Press.

COMMERCIAL TELEVISION

The information given in the table is of number of appearances and total screen time in seconds. Thus 7/105 means that the advertiser's announcement will, during the week covered, be screened seven times and for a total of 105 seconds.

Period—January 29 to Feb. 4

PRODUCT	London	Midland	North	Scotland	Wales & West	South	North-east	Anglia	Ulster	Westward	Border	Grampian	Eireann	Channel Is.
Anadin...	4/120	3/67	2/60	1/30	2/60	2/60	2/60	2/60	2/60	2/60	3/90	2/60	—	2/60
Askit powders and tablets	—	—	—	7/49	—	—	—	—	—	—	3/21	2/14	—	—
Bisodol	—	2/14	—	—	—	—	—	—	—	—	—	—	—	—
Buttercup syrup	—	2/30	3/45	—	—	—	—	—	—	—	1/15	—	—	—
Coldrex	—	—	—	—	—	—	—	—	—	—	—	—	1/15	—
Cow & Gate milk foods	1/30	—	—	1/30	2/60	—	1/30	—	1/30	—	—	—	—	3/90
Fennings gripe mixture	—	—	2/14	—	—	—	—	—	—	—	—	—	—	—
junior aspirin	—	—	1/7	—	—	—	—	—	—	—	—	—	—	—
Glymiel protective hand cream	5/75	—	—	1/15	—	—	—	—	—	1/15	—	—	—	—
Horlicks	3/90	4/120	5/150	3/120	4/120	3/90	4/120	6/240	2/60	—	—	3/120	2/27	5/150
Kleenex Silk-Soft	5/150	5/150	5/150	4/120	4/120	5/150	4/120	4/120	4/120	4/120	5/150	4/120	—	4/120
Milk of Magnesia tablets	—	—	—	—	—	—	—	—	—	1/30	—	—	—	1/30
Ostermilk and Farex	—	—	—	—	—	—	—	—	2/60	—	—	—	—	—
Score	4/120	3/90	3/90	3/90	4/120	4/120	3/90	4/120	4/120	4/120	4/120	4/120	—	4/120
Rinstead pastilles	2/30	2/30	—	2/30	1/15	1/15	2/30	3/45	—	2/30	3/45	2/30	—	—
T.C.P.	1/30	1/30	1/30	1/30	1/30	1/30	1/30	2/60	2/60	1/30	1/30	1/30	—	—
White Cross cough mixture	—	—	4/60	—	—	—	—	—	—	—	—	—	—	—
Wright's coal tar soap	1/15	1/15	1/15	—	1/15	1/15	1/15	1/15	—	1/15	1/15	—	—	—